WASHINGTON STATE

2020 LAW ENFORCEMENT OFFICERS' AND FIRE FIGHTERS' PLAN 1 OTHER POSTEMPLOYMENT BENEFITS ACTUARIAL VALUATION REPORT

Office of the State Actuary
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AUGUST 2021

Office of the State Actuary

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Letter of Introduction
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As directed by the Legislature, the Office of the State Actuary (OSA) completed an actuarial valuation of the postemployment medical and long-term care benefits provided by local government employers to members of the Law Enforcement Officers' and Fire Fighters' Retirement System Plan 1 (LEOFF 1).

This report shows the value of the statewide liability, as of June 30, 2020, for the retiree medical benefits provided by LEOFF 1 employers. Statewide liabilities are for informational purposes only. The responsibility to fund this liability belongs to the employers of LEOFF 1 members, not the state of Washington.

The report is organized into six sections. The **Key Results** section summarizes the primary results and provides an explanation for the change in liability since the last valuation. The **Background** section discusses the nature of the Other Postemployment Benefits (OPEB) liabilities, history of reporting requirements under the Governmental Accounting Standards Board (GASB), and how the liabilities are calculated. The **Actuarial Exhibits** section documents the details of the LEOFF 1 OPEB analysis and includes sensitivity around the assumptions and projections of future results. The detailed results include sensitivity analysis about how the results can change under a different set of assumptions. The **Participant Data** section provides summarized information about the member population. The **Assumptions** section provides a summary of the actuarial assumptions used in this valuation. The **Appendix** provide a summary of the postemployment medical benefits.

LEOFF 1 employers should not use this report to satisfy their individual employer reporting requirements under GASB Statement No. 75 (GASB 75). OSA created an online tool to help small employers calculate their individual reporting requirements. This online tool, available on our *website*, utilizes the alternative measurement method allowed under GASB 75 and can be used by employers with fewer than 100 total plan members.

We encourage you to submit any questions you might have concerning this report to our regular e-mail address: *state.actuary@leg.wa.gov*.

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I. Key Results

HOW HAS THE LIABILITY CHANGED?

This section summarizes how the statewide LEOFF 1 OPEB liability changed since the prior valuation. For GASB 75, the Actuarial Accrued Liability (AAL) under the Entry Age Normal (EAN) cost method is referred to as the Total OPEB Liability (TOL).

Key Results		
	Measurement Date	
(Dollars in Thousands)	6/30/2018	6/30/2020
Total OPEB Liability	$2,294,526	$2,534,698
Benefit Payments/Employer Contribution	$116,550	$119,366

WHY DID THE LIABILITY CHANGE?

A change in liability occurs between measurement dates due to: 1) the passage of time; 2) unexpected changes in experience; and 3) other significant changes in plan provisions, actuarial assumptions, and methodology. In total, the liability increased by approximately 10 percent since the prior valuation.

In a plan that is closed to new members, liabilities generally decrease from one measurement date to the next due to diminishing plan membership. However, liabilities can increase when assumptions change or if the cost of benefit increases outweigh the decrease associated with fewer members drawing benefits.

An unexpected change in experience occurs when actual demographic experience differs from what we expected in the valuation. Updated participant data is reflected every two years and a change in liability will emerge as a result of the actual data. In this case, the actual experience led to a 1 percent increase in liabilities.

One significant plan change was the removal of the Excise Tax. This change decreased liabilities by approximately 7 percent.

Assumption changes are another source of significant change to the liabilities of the plan. The discount rate is updated with each valuation and increased liabilities for this valuation by approximately 20 percent. We also reflected new demographic assumptions, related to a recent experience study on the Washington State retirement systems, which increased liabilities by approximately 1 percent.

The above summary is not intended to cover every change. Please see a more detailed analysis of the gain/loss found later in this report.

WHAT'S NEW TO THE REPORT?

We made no notable or structural changes to the report.

II. Background

OTHER POSTEMPLOYMENT BENEFITS

For purposes of LEOFF 1, OPEB are benefits that are provided to retired employees beyond those provided by their pension plans. Such benefits include medical, prescription drug, life, dental, vision, disability, and Long-Term Care (LTC) insurance. LEOFF 1 employers pay 100 percent of "necessary medical services" for LEOFF 1 retirees.

NECESSARY MEDICAL SERVICES

The medical benefit, set up under the Revised Code of Washington (RCW) 41.26.150(1), provides free medical and LTC coverage for LEOFF 1 retirees. When a LEOFF 1 member retires, the employer they retire from is responsible for the full cost of any postemployment medical benefits. A list of the minimum services for which employers must reimburse retirees is provided in the **Appendix**.

Individual local disability boards administer the LEOFF 1 medical plan. Each board may interpret the language "necessary medical services" differently.

INSURANCE

Insurance allows the LEOFF 1 employers to control the volatility in annual medical service costs. For example, if a LEOFF 1 employer only has one retiree, the ongoing annual costs will vary widely depending on whether that retiree had a relatively healthy year or entered LTC. When many employers group together in an insurance pool, they will be able to pay a steadier annual amount to offset medical service costs. The Legislature has approved this practice by codifying it in RCW 41.26.150(4).

LEOFF 1 employers may participate in insurance pools established by certain associations, and most LEOFF 1 employers have joined their respective association's medical plans. The remaining LEOFF 1 employers that choose not to join have several other options. Some obtain coverage through union health and welfare plans (e.g., Teamsters), while others contract through individual insurance providers or self-insure.

OPEB FINANCIAL REPORTING REQUIREMENTS

GASB Statements No. 74 and 75 (GASB 74 and GASB 75) were issued in 2015 and require more extensive disclosures and supplementary information than the prior reporting requirements. Most of GASB 74 does not apply to LEOFF 1 retiree healthcare benefits, as these are not pre-funded through a qualifying trust. GASB 75 became effective for employer fiscal years beginning after June 15, 2017, and requires employers to disclose key plan measures relative to their plan members, including the TOL and OPEB expense.

GASB 75 requires the inclusion of specific tables and the use of the EAN cost method to measure AAL, referred to as the TOL. Also, the discount rate for plans without a dedicated trust fund will be based on a 20-year municipal bond index which fluctuates from year-to-year. The statewide LEOFF 1 OPEB liability is not reported; however, local employers are required to disclose their most recent GASB 75 liability.

ACTUARIAL VALUATION

An actuary performs an actuarial valuation to estimate what benefits will be paid throughout the future lifetimes of current members, and then discounts those payments back to the present. The result is the Present Value of Future Benefits (PVFB). For example, a dollar amount today, equal to the PVFB, could be invested during plan members' lifetimes to pay all future benefits when the

members are eligible. In this case, the benefit payments are the necessary medical service costs for the LEOFF 1 retirees.

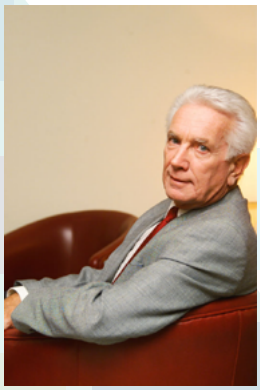
Under an actuarial valuation, an actuary needs inputs such as participant data, benefit provisions, and assumptions. Participant data includes age, membership service, employment status, etc. Benefit provisions include the structure of the benefits that the members receive—in this case, the retiree medical benefits paid by employers. Assumptions include the discount rate, medical trends, decrement rates, medical and LTC costs, etc.

An actuary analyzes these inputs using an actuarial cost method. The chosen cost method allocates costs between past and future plan membership service before retirement. Distinct actuarial cost methods produce different results since each method allocates costs differently. The EAN cost method required under GASB 75 allocates plan benefits so they are earned, or accrued, as a level percentage of pay throughout an employee's working lifetime.

FUNDING POLICY

The LEOFF 1 medical expenses are funded on a pay-as-you-go basis, meaning that LEOFF 1 employers pay these costs as they occur. This generally means today's taxpayers of cities with retired LEOFF 1 members are paying for benefits that were earned in the past. This funding policy is in conflict with the principle of intergenerational equity, where the goal is to fund a member's benefit over their working lifetime.

III. Actuarial Exhibits



Office of the State Actuary

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Actuarial Certification Letter
LEOFF 1 OPEB Actuarial
Valuation Report

August 2021

This report documents the results of an actuarial valuation of the postemployment medical benefits offered by employers of the Law Enforcement Officers' and Fire Fighters' Retirement System Plan 1 (LEOFF 1). The primary purpose of this valuation is to determine the statewide LEOFF 1 Other Postemployment Benefits (OPEB) liability as of June 30, 2020. This valuation should not be used for other purposes. Individual employers should not use this report to satisfy their individual reporting requirements under the Governmental Accounting Standards Board (GASB). Please replace this analysis with the results of our next report when available.

The valuation results presented in this report are not used for financial reporting, and therefore do not need to be restricted by financial reporting requirements under GASB Statement No. 75 (GASB 75).

The Department of Retirement Systems (DRS) provided the member data, as of June 30, 2020, used in this report. We checked the data for reasonableness as appropriate based on the purpose of the valuation. An audit of the participant data was not performed. We relied on all the information provided as complete and accurate. In our opinion, this data is adequate and complete for the purposes of this valuation.

The valuation results summarized in this report require assumptions about future economic and demographic events. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: Plan experience differing from anticipated economic or demographic assumptions; changes to those assumptions; changes in plan provisions or applicable law.

Unexpected significant events, such as COVID-19, can lend itself to a different future than what we project. The full extent of COVID-19's impacts on our Other Postemployment Benefits (OPEB) analysis is not known as of the publication of this report.

There is no established trust fund dedicated to these benefits, therefore no assets were accounted for in this valuation. For this report, we assume a discount rate consistent with GASB 75 which requires the discount rate be based on a 20-year, tax exempt, high-quality municipal bond rate if there is not a dedicated trust. We rely on the Bond Buyer General Obligation 20-Bond Municipal Index at the measurement date. The remaining non-healthcare economic and demographic assumptions are the same as those used in the *June 30, 2019, Actuarial Valuation Report (AVR)* on the DRS retirement systems, and were developed from the *2013-2018 Demographic Experience Study* and the *2019 Economic Experience Study* performed by OSA. Our office will complete a new economic experience study in the fall of 2021.

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Actuarial Certification Letter

OSA does not employ healthcare actuaries, so we are not qualified to set healthcare assumptions. We previously contracted with healthcare actuaries at Milliman as part of our *2018 Actuarial Valuation of LEOFF 1 Medical Benefits* to prepare healthcare assumptions. For this report, we continued our reliance on those assumptions following internal analysis. We determined these healthcare assumptions remain reasonable for the purpose of the analysis and rolled forward the assumptions to the June 30, 2020, measurement date.

Milliman also previously performed analysis on the impact of the excise tax on "Cadillac" plans and provided medical trend assumptions both with and without the excise tax. The excise tax was repealed by H.R. 1865, so results in this report are prepared using assumptions that exclude the excise tax. For more information regarding these assumptions, see the **Assumptions** section.

We relied on the **ProVal®** software developed by Winklevoss Technologies to perform this retiree medical valuation. To assess the general operation of this model, we reviewed the output for reasonableness, which includes comparing the results to our simplified estimates done in Microsoft Excel. We are not aware of any known weaknesses or limitations of the model that have a material impact on the results. Additionally, we considered how the use of different inputs to the model (e.g., data, assumptions, or provisions) produce different results and evaluated the relative impacts to our expectations; this allows us to gain a deeper knowledge of the model's important dependencies and major sensitivities. The use of the model for this analysis is appropriate given its intended purpose.

We believe that the data, assumptions, and methods used in this valuation are reasonable and appropriate for the primary purpose stated above. The use of another set of data, assumptions, and methods, however, could also be reasonable and could produce materially different results. In our opinion, all data, assumptions, methods, and calculations are appropriate and conform to generally accepted actuarial principles and standards of practice as of the date of this publication.

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

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

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Actuary

GASB 75 RESULTS

The primary purpose of this valuation is to determine the statewide LEOFF 1 OPEB liability. The statewide liabilities are not used for financial reporting, but we provide this section to discuss the tables local employers are required to produce in order to be compliant with GASB 75.

On an annual basis, local employers of LEOFF 1 members are required to provide the following tables that summarize OPEB liabilities:

- Schedule of Changes in the TOL.
- OPEB Expense.
- Deferred Outflows and Inflows of Resources.
- Subsequent Recognition Years.
- Sensitivity of the TOL to Changes in Discount Rate and Healthcare Trend Assumptions.
- Summary of Plan Participants.
- Disclosure of Assumptions and Methodology.

The Schedule of Changes in TOL table reconciles the change in the TOL from the prior year's valuation. A statewide valuation was not produced for LEOFF 1 OPEB last year; however, we performed a reconciliation of changes since the *2018 Actuarial Valuation of LEOFF 1 Medical Benefits*. Please see the Change in TOL by Source table as part of the **Gain/Loss Analysis** later in this section.

The reconciliation is also used to calculate the components of the OPEB Expense table. Since we assume all LEOFF 1 members are retired (see the **Assumptions** section), the amortization period is one year, and the OPEB Expense table components match the TOL reconciliation described above. Under GASB 75, assumption changes and differences between expected and actual experience are amortized, or spread out, over a time period equal to the average of the expected remaining service lives of all members that are provided with benefits through the OPEB plan.

LEOFF 1 does not have deferred outflows or inflows since all costs are recognized immediately. As such, the Deferred Outflows and Inflows of Resources table and the Subsequent Recognition Years table both would display all zeroes.

GASB 75 also requires an analysis of the impact of changing the Healthcare Trend and Discount Rate assumptions by 100 basis points. Please see the **Sensitivity Analysis** later in this section for details on how the statewide liability can change under a different set of assumptions.

We relied on data as of the June 30, 2020, valuation date. Please see the **Participant Data** section for details on the data used.

ACTUARIAL ACCRUED LIABILITY

The EAN cost method is the only actuarial cost method allowed under GASB 75 reporting requirements. The prescribed method allocates plan benefits so they are earned as a level percentage of pay throughout an employee's working lifetime. The liabilities under the EAN cost method are the employer's total accrued (or earned) liability from the retiree medical benefits offered by LEOFF 1 employers. These liabilities are based on all service earned as of the valuation date. The AAL under the EAN cost method is also referred to as the TOL in GASB 75.

The table below shows the TOL, as of the June 30, 2020, valuation date, and the portion that is attributable to medical and LTC benefits.

Total OPEB Liability	
(Dollars in Thousands)	
Medical*	$1,363,023
Institutional Long-Term Care	658,518
Non-Institutional Long-Term Care	513,157
Total	**$2,534,698**

**Includes medical claim costs and reimbursement of Medicare Part B premiums.*
Note: Totals may not agree due to rounding.

The LEOFF 1 OPEB liability will not significantly change if a different actuarial cost method is used due to the maturity of the plan.

GAIN/LOSS ANALYSIS

The results of this report are based on assumptions about future economic and demographic events. It is important to note over time how actual events differed from those assumptions. An event that causes the plan to cost less than was expected is described as a gain to the plan. An event that causes the plan to cost more than was expected is described as a loss to the plan. An analysis of the gains and losses between the last valuation and this year's valuation shows which events are attributable to the change in expected cost of the plan.

The first table shows the development of the expected change in the liability since the last valuation (*2018 Actuarial Valuation of LEOFF 1 Medical Benefits*). Overall, we expected the liability to decrease by about 3 percent due to the passage of time:

- Two years of expected retiree benefit payments decreased the liability.
- Active employees accruing additional benefits (service cost) and two fewer years of discounting (interest) both increased the liability.

Expected Change in TOL	
(Dollars in Thousands)	
6/30/2018 TOL	**$2,294,526**
Service Cost	1,219
Interest	181,129
Benefit Payments	(248,555)
6/30/2020 Expected TOL	**2,228,318**
Expected Change in TOL	**($66,207)**

However, the June 30, 2020, TOL will change by more than just the expected change. The other two major sources of change are Liability (Gain)/Loss and Other Changes. Liability (Gain)/Loss examines how new census data compares to what we expected. Other Changes include changes in assumptions and methodology since the prior valuation. The next table reconciles the total change in TOL from these sources.

In total, the Liability (Gain)/Loss section increased liabilities by approximately 1 percent, which was largely attributable to fewer observed deaths than expected.

In total, the Other Changes increased liabilities by approximately 13 percent as summarized below.

- **Discount Rate Change** – The discount rate decreased from 3.87 percent to 2.21 percent with the new measurement date which increased liabilities by 20 percent.
- **Removal of Excise Tax** – Recent legislation repealed the excise tax, so our healthcare trends no longer include this tax. Removal of the excise tax decreased liabilities by approximately 7 percent.
- **Update Demographic Assumptions** – Our office updated the demographic assumptions for the Washington State retirement systems during the *2013-18 Demographic Experience Study*. This study directly impacts this report since we rely on those assumptions to help determine how long LEOFF 1 retirees draw benefits. Updating these assumptions increased liabilities by approximately 1 percent.

Change in TOL by Source	
(Dollars in Thousands)	
6/30/2018 TOL	**$2,294,526**
Expected Change in Liability	**($66,207)**
Liability (Gain)/Loss	
Termination	$0
Retirement	1,175
Mortality	18,181
Disability	0
Other Liabilities	66
Total Liability (Gains)/Losses	**$19,423**
Other Changes	
Method Changes	$0
Assumption Changes	439,874
Remove Excise Tax	(152,917)
Total Other Changes	**$286,957**
Total Change	**$240,173**
6/30/2020 TOL	**$2,534,698**

SENSITIVITY ANALYSIS

A single point estimate is only the start of understanding the liabilities. This estimate will only be realized if future economic and demographic experience match our assumptions. It is equally important to understand what will happen if the economic and demographic experience are different than we assumed.

GASB 75 is not applicable to the valuation of statewide LEOFF 1 OPEB liabilities since the liabilities are not used for financial reporting. However, we consider the same sensitivity analysis for this report as required under GASB 75. Below, we analyze the impact of changing the Healthcare Trend and Discount Rate assumptions by 100 basis points.

Sensitivity Analysis—Medical and LTC Trends			
(Dollars in Thousands)	1% Decrease	Current Trend Rate	1% Increase
Total OPEB Liability	**$2,282,320**	**$2,534,698**	**$2,827,713**

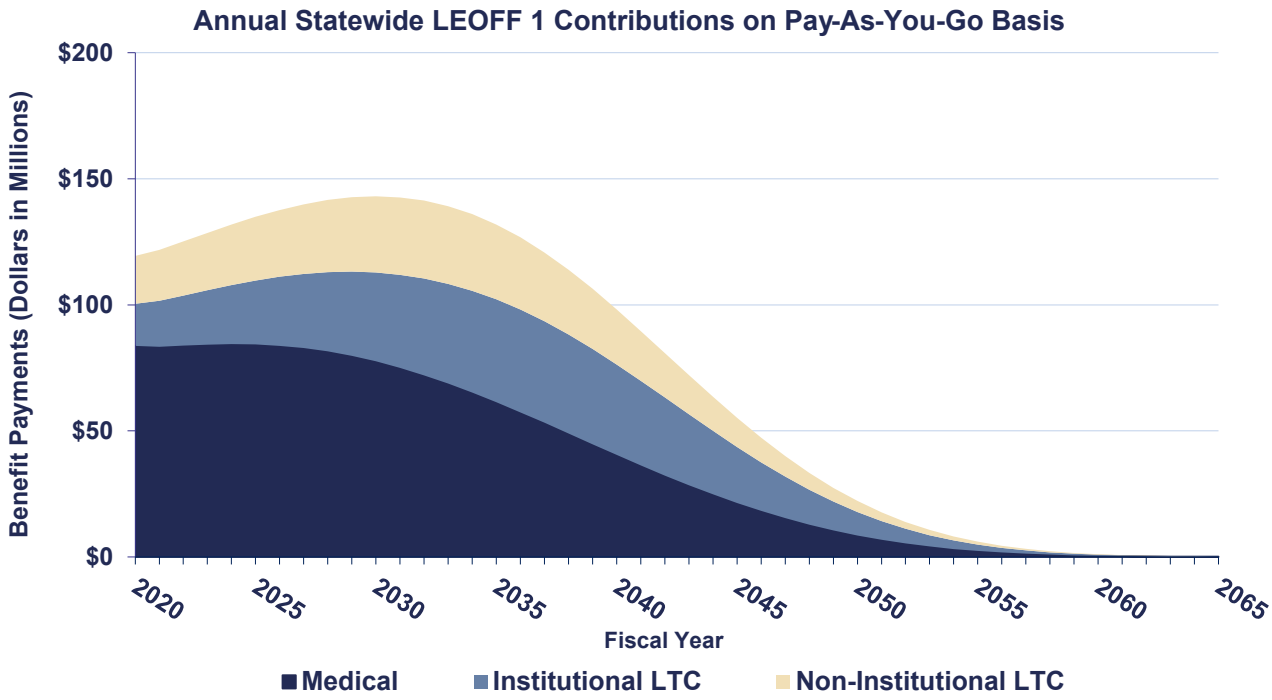
Sensitivity Analysis—Discount Rate			
(Dollars in Thousands)	1% Decrease	Current Discount Rate	1% Increase
Total OPEB Liability	**$2,852,950**	**$2,534,698**	**$2,267,622**

PROJECTIONS

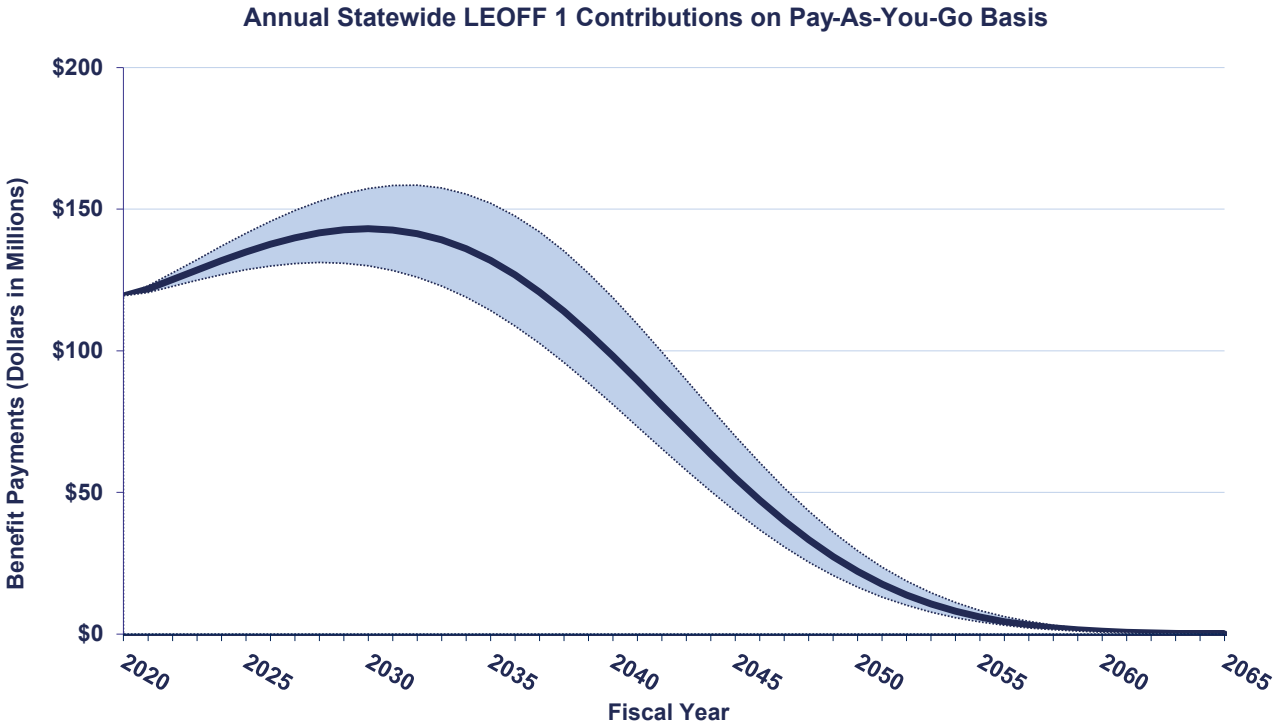
It is important to look at the projections of the benefit payments in order to determine whether the payments are manageable. Projections allow decision makers to prepare for these obligations by illustrating what costs could lie ahead.

We project what the stream of contributions will look like with a pay-as-you-go funding policy for the current members for the next 45 years. Up until year 2030, the annual benefit payments increase as a result of high assumed medical inflation and the aging of the population. After year 2030, the annual benefit payments will reach a peak and decrease to zero in the long run as the retiree population starts to decline and the assumed projected medical inflation slows down.

In addition to total benefit payments, the graph below shows the breakdown between medical costs, institutional LTC, and non-institutional LTC.



The graph above focuses on our current expectations for medical inflation. However, the results can vary under a different set of assumptions. The graph below displays how the projected benefit payments can change if the medical and LTC trends are either 1 percent lower or 1 percent higher than assumed, as illustrated by the shaded region.



IV. Participant Data

SUMMARY OF PLAN PARTICIPANTS

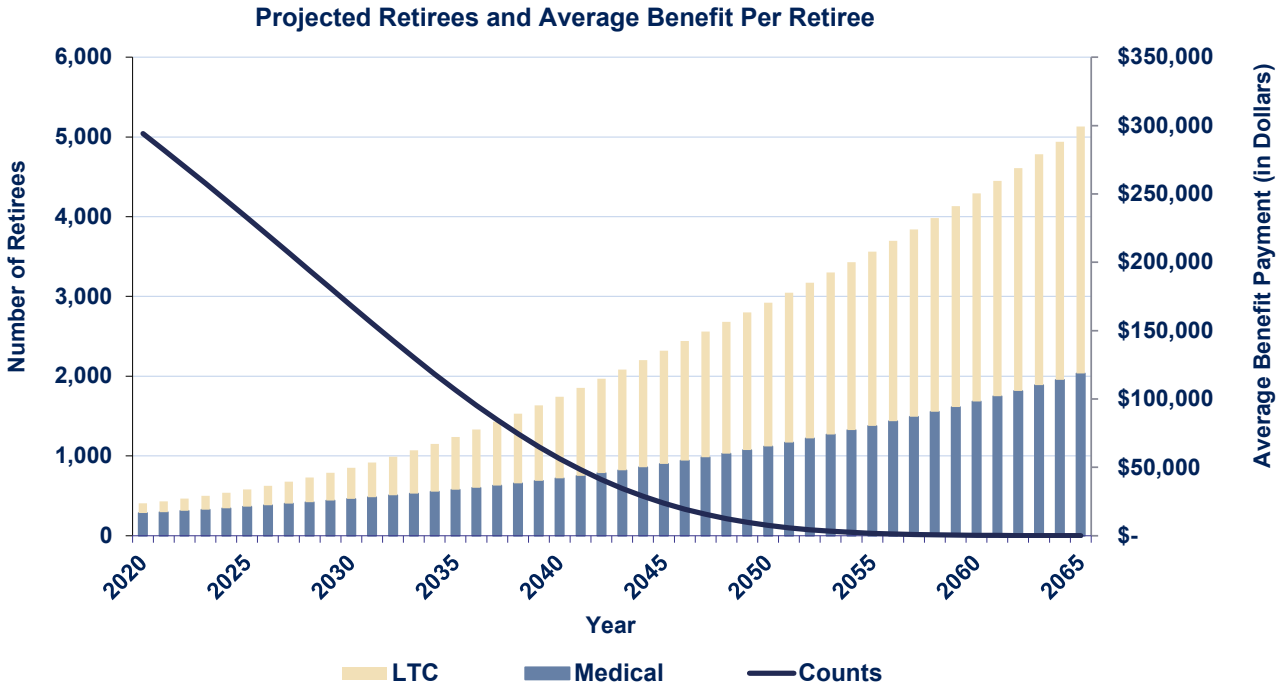
Police and fire personnel first employed prior to October 1, 1977, are in LEOFF 1. Members first employed on or after October 1, 1977, are in LEOFF Plan 2 (LEOFF 2). All LEOFF 1 members are eligible for employer-provided retiree medical. The following table includes a breakdown of the active and inactive members that are receiving employer-provided retiree medical care currently or are eligible to receive employer-provided retiree medical care in the future. Any retiree medical benefits offered to members of LEOFF 2 are outside the scope of this report.

Summary of LEOFF 1 Plan Participants	
Active Members*	
Number	15
Average Age	68
Inactive Members**	
Number	5,027
Average Age	76

For this report, remaining active members valued as retirees. See **Assumptions section for details.*

***Excludes survivors.*

Since LEOFF 1 is a closed plan, meaning new hires cannot enter the plan, the population count is expected to steadily decline in future years. As the population ages, the average amount paid per retiree will increase. A portion of this increase is due to inflation, but the increase is primarily attributable to the aging population and current members entering LTC in the future. The next graph shows the projected population and the average annual healthcare benefit payment (medical and LTC) per LEOFF 1 retiree.



SUMMARY OF EMPLOYERS

The following table summarizes the LEOFF 1 members as of the measurement date by status, job type, and major employer category.

Employee Count by Employer Type and Status				
Employer Type	Active	Service Retiree	Disability	Total
Police				
First Class City	2	666	530	1,198
Other City	0	333	404	737
County	5	397	389	791
Total Police	**7**	**1,396**	**1,323**	**2,726**
Firefighters				
First Class City	5	406	1,023	1,434
Other City and Fire Protection Districts	3	421	405	829
County and Port	0	23	30	53
Total Firefighters	**8**	**850**	**1,458**	**2,316**
Total Members	**15**	**2,246**	**2,781**	**5,042**

V. Assumptions

We use both economic and demographic assumptions to determine liabilities for this valuation. This section summarizes our assumptions.

ECONOMIC ASSUMPTIONS

The economic assumptions are used in the actuarial valuation to determine liabilities and benefit payments in the future. For presentation purposes, they are shown separately for non-healthcare and healthcare.

The **non-healthcare** economic assumptions are summarized in the following table.

Non-Healthcare Economic Assumptions		
Discount Rate*	Beginning of Period (June 30, 2018)	3.87%
	End of Period (June 30, 2020)	2.21%
Inflation**		2.75%

**Per Bond Buyer General Obligation 20-Bond Municipal Index.*

***Based on the CPI: Urban Wage Earners & Clerical Workers, Seattle-Tacoma-Bellevue, WA - All Items.*

The inflation assumption is a building block component of the healthcare trend rates and reflects our office's current assumption for future inflation. This assumption is studied by our office every two years as part of the economic experience study. Please see our website for the most recent study. All other non-healthcare economic assumptions are consistent with assumptions presented in the 2019 AVR.

The **healthcare** economic assumptions specify how we expect the healthcare costs and utilization of medical services to grow in the future. OSA does not employ healthcare actuaries, so we are not qualified to set healthcare assumptions. We previously contracted with Milliman as part of our *2018 Actuarial Valuation of LEOFF 1 Medical Benefits* to prepare healthcare assumptions, which includes medical trends, long-term care trend, claims cost, and Medicare coverage. For this report, we rolled-forward these assumptions to the June 30, 2020, measurement date. We believe a roll forward of the medical trends is reasonable based on a comparison between the relationship in medical trends found in the 2018 PEBB OPEB AVR and the *2018 Actuarial Valuation of LEOFF 1 Medical Benefits* as well as how more recent trends changed in the 2020 PEBB OPEB AVR. Further, we believe a roll forward of LTC assumptions is reasonable based on internal analysis of recent LTC trends and Washington State LTC costs.

The medical cost trends used in valuing the TOL exclude the excise tax consistent with current federal law.

Costs are expected to grow in the future for medical claims, Medicare Part B premiums, and LTC. We project future growth using the healthcare trend rates. The healthcare trends will vary for each type of cost and by Medicare eligibility. The non-Medicare (under age 65) trends are shorter because all LEOFF 1 members are expected to reach age 65 by 2022.

Healthcare Trends			
Under Age 65			
Year	**Medical Cost**	**Medicare Part B**	**LTC**
2020	5.4%	N/A	4.5%
2021+	5.1%	N/A	4.5%
Over Age 65			
Year	**Medical Cost**	**Medicare Part B**	**LTC**
2020	5.3%	4.6%	4.5%
2021	5.1%	4.9%	4.5%
2022	5.1%	5.9%	4.5%
2023	5.1%	5.7%	4.5%
2024	5.1%	5.0%	4.5%
2025	5.1%	5.4%	4.5%
2026	5.1%	5.9%	4.5%
2027	5.1%	5.6%	4.5%
2028	5.1%	5.6%	4.5%
2029	5.1%	5.3%	4.5%
2030	5.1%	5.1%	4.5%
2040	5.3%	4.5%	4.5%
2050	5.1%	4.4%	4.5%
2060	5.0%	4.4%	4.5%
2070	4.5%	4.4%	4.5%
2080+	4.3%	4.3%	4.5%

Note: For display purposes, tables were summarized. The full table is available upon request.

The retiree medical costs and the Medicare premiums are displayed in the following table. The tables are broken into medical costs for non-Medicare and Medicare aged populations, as well as reimbursement of Medicare Part B premiums. For this valuation, we assume all LEOFF 1 employers reimburse the Medicare Part B premiums.

Annual Retiree Medical Cost and Medicare Premiums by Age *(As of June 30, 2020)*			
	Non-Medicare	Medicare	
Age	Medical	Medical	Part B Premiums
60	$50,569	N/A	N/A
61	$52,382	N/A	N/A
62	$54,260	N/A	N/A
63	$57,512	N/A	N/A
64	$60,958	N/A	N/A
65	N/A	$13,102	$1,737
72	N/A	$14,578	$1,737
77	N/A	$15,396	$1,737
82	N/A	$15,548	$1,737
89+	N/A	$14,639	$1,737

**For display purposes, tables were summarized. Costs between ages are linearly interpolated.*
Note: Table displays the average annual cost per person (in Dollars).

LTC is also available to eligible LEOFF 1 retirees. There are two types of LTC covered under LEOFF 1 OPEB:

1. **Institutional** – Care provided in a nursing home or wing of a hospital designed to provide nursing care services or an assisted living facility, including:
   a) **Skilled** – includes nursing and rehabilitation services that can only be performed by skilled medical personnel; must be under orders of a physician and provided on a 24-hour basis.
   b) **Intermediate** – includes continuous treatment not meeting all the requirements for skilled care.
   c) **Custodial** – includes assistance in carrying out daily living activities.
2. **Non-Institutional** – Includes all home health and adult day-care services.

The three primary assumptions for LTC are the incidence rate (likelihood of entering LTC), the duration (length of stay), and the annual cost. The following table shows these assumptions separately for Institutional Care and non-Institutional Care.

Long-Term Care Assumptions *(As of June 30, 2020)*						
	Institutional Care			Non-Institutional Care		
Age	Annual Incidence	Duration (in Years)	Annual Cost*	Annual Incidence	Duration (in Years)	Annual Cost
55	0.08%	2.21	$95,077	0.40%	2.13	$69,964
62	0.15%	2.20	$95,077	0.68%	2.08	$69,964
67	0.28%	2.17	$95,077	1.00%	2.16	$69,964
72	0.58%	2.14	$95,077	1.52%	2.20	$69,964
77	1.38%	2.10	$95,077	2.50%	2.22	$69,964
82	2.94%	2.15	$95,077	3.86%	2.25	$69,964
87	5.73%	2.05	$95,077	6.18%	2.17	$69,964
92	10.67%	1.82	$95,077	8.39%	1.87	$69,964
97	15.01%	1.54	$95,077	8.41%	1.71	$69,964

**Based on an assumed blend of: 40% in assisted living facilities with an average cost of $67,291, and 60% in nursing facilities with an average cost of $113,601.*

Note: Table displays the average annual cost per person (in dollars).

The LTC table can be interpreted as follows: A 72-year-old LEOFF 1 retiree has a 0.58 percent chance of entering institutional care this year. If the member enters institutional care this year, the member is expected to stay approximately 26 months (2.14 years) at an anticipated cost of $95,077 in the first year. The annual LTC cost increases each year in our valuation model by 4.5 percent.

DEMOGRAPHIC ASSUMPTIONS

Demographic assumptions include rates of mortality, as well as participation percentage and Medicare coverage. The rates of mortality are consistent with those presented in the 2019 AVR which were updated during our *2013-18 Demographic Experience Study* for the Washington State retirement systems.

As a simplifying assumption for valuation purposes, we assumed the 15 remaining active members retired as of the valuation date. All active members are retirement eligible and have a high expected probability of retirement in the near-term. Our assumed change, therefore, has little impact on liability results, but does produce an immaterial liability increase to the valuation.

Participation percentage refers to how many current active members will choose to use the employer-subsidized medical coverage. We relied on Milliman for the Medicare coverage assumption which refers to how many retirees are covered by Medicare.

Demographic Assumptions	
Participation Percentage	100%
Medicare Coverage	100%

VI. Appendices

SUMMARY OF MINIMUM MEDICAL SERVICES

All remaining active members are eligible for retirement and are expected to receive postemployment medical benefits.

Each disability board has the discretionary power to determine which costs they will reimburse and which costs they will not reimburse. However, there is a list of minimum services for which they must reimburse the retiree, as defined in RCW 41.26.030(20). These services are outlined below:

- Hospital board and room not to exceed semi-private, unless condition requires otherwise.
- Hospital services, other than board and room.
- Licensed physicians or surgeons.
- Licensed osteopaths.
- Licensed chiropractors.
- Charges of a registered graduate nurse.
- Physician-prescribed drugs and medications.
- Diagnostic X-ray and laboratory examinations.
- X-ray, radium, and radioactive isotopes therapy.
- Anesthesia and oxygen.
- Rental of durable medical and surgical equipment.
- Artificial limbs and eyes; and casts, splints, and trusses.
- Professional ambulance services to transport to or from a hospital.
- Dental charges resulting from accidental injury to the teeth if treatment starts within 90 days.
- Nursing home confinement or hospital extended care facility.
- Physical therapy by a registered physical therapist.
- Blood transfusions.
- Licensed optometrists.

The list above represents a summary of minimum services and does not determine the overall medical benefits for each individual. Ultimately, each disability board determines which services to reimburse.

THE OFFICE OF THE STATE ACTUARY'S WEBSITE

Our website contains additional information and educational material not included in this report. The site also contains an archive of prior actuarial valuation reports and other recent studies that OSA had produced. The following is a list of materials found on our website that could be useful to the reader.

Glossary
Definitions for frequently used actuarial terms.

Prior OPEB Valuations
Archive of prior OPEB valuations.

OPEB Tools
LEOFF 1 employers should not use this report to satisfy their individual employer reporting requirements under GASB 75. OSA created an online tool to help certain small employers calculate their individual reporting requirements. This online tool utilizes the alternative measurement method allowed under GASB 75 and can be used by eligible employers with fewer than one hundred total plan members.

2013-18 Demographic Experience Study
Most recent report examining demographic behavior within each retirement system.

2019 Report on Financial Condition and Economic Experience Study
Report examining the financial health of the retirement systems and long-term economic assumptions.

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