



Seattle Police Department Demographic Impacts

Educational Briefing
September 23, 2020

Issue

- At the July board meeting questions were raised regarding the potential impacts to LEOFF Plan 2 if there are significant layoffs and/or retirements at the Seattle Police Department

Actuarial Analysis

LEOFF 2 Board requested actuarial analysis of 4 hypothetical scenarios:

1. Termination of the 700 least senior, active members from the Seattle PD with no replacement members
2. Termination of the 90 least senior and retirement of the 90 most senior active members from the Seattle PD with no replacement members
3. Reduction in assumed future salary growth by 0.25 percent
4. Reduction in the number of assumed annual future hires by 0.25 percent

Actuarial Disclaimers

- Actuarial analysis can become quickly outdated. OSA intends this analysis to be used for education purposes during the September Board meeting. Please don't rely on this analysis beyond the 2020 Interim
- Please read the analysis shown in this communication as a whole. Distribution of, or reliance on, only parts of this communication could result in its misuse and may mislead others

Current Plan Demographics

Average LEOFF 2 Demographics				
	Count	Age	Service	Salary
All LEOFF 2	18,557	43	14	\$114,085
Seattle LEOs	1,358	44	15	\$137,966

Hypothetical #1

- Termination of the 700 least senior, active members from the Seattle PD with no replacement members, is projected to result in an overall savings to the plan:
 - 0.01% decrease to the contribution rate
 - 0.3% increase to the plan funded status

Hypothetical #2

- The termination of the 90 least senior and retirement of the 90 most senior active members from the Seattle PD with no replacement members, is projected to result in an overall cost to the plan:
 - No impact to the contribution rate
 - 0.2% decrease to the plan funded status

Hypothetical #3

- A reduction in assumed future salary growth by 0.25 percent, is projected to result in an overall savings to the plan:
 - 0.26% decrease to the contribution rate
 - 0.6% increase to the plan funded status

Hypothetical #4

- A reduction in the number of assumed annual future hires by 0.25 percent, is projected to result in an overall savings to the plan
 - OSA cannot at this time provide an analysis of the projected impact to the contribution rate and funded status of the plan until the 2019 projection system (AVR) is complete
 - OSA will follow-up with analysis for a future Board meeting once 2019 AVR is complete



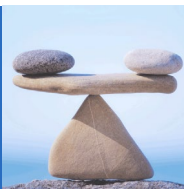
Thank You

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Office of the State Actuary

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September 11, 2020

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

SUBJECT: ANALYSIS FOR LEOFF 2 SEPTEMBER BOARD MEETING

Dear Steve,

At your request, our office performed scenario analysis on reductions to the Seattle Police Department (Seattle PD) and changes to the salary and system growth assumptions. We performed this analysis for the Law Enforcement Officers' and Fire Fighters' (LEOFF) Plan 2 September Board Meeting. These scenarios are meant for educational purposes and are not intended to reflect actual policy decisions. In addition to the actuarial analysis, we included data for the average active member demographics of the LEOFF 2 Plan and the Seattle Law Enforcement Officers (LEOs).

Average LEOFF 2 Demographics				
	Count	Age	Service	Salary
All LEOFF 2	18,557	43	14	\$114,085
Seattle LEOs	1,358	44	15	\$137,966

The analysis includes the following four scenarios:

1. Termination of the 700 least senior, active members from the Seattle PD with no replacement members.
2. Termination of the 90 least senior and retirement of the 90 most senior active members from the Seattle PD with no replacement members.
3. Reduction in assumed future salary growth by 0.25 percent (25 basis points).
4. Reduction in the number of assumed annual future hires by 0.25 percent (25 basis points).



Summary of Results

We estimated how each scenario impacts our [2019 Actuarial Valuation Report](#) (AVR) results and the short-term impact could be a cost (or savings) dependent upon the scenario. The table below displays how the contribution rates and funded status are impacted under each scenario. For context, we also provided the current rates and funded status from the 2019 AVR.

Impact on Contribution Rates and Funded Status					
	2019 AVR	700 Terminations	90 Terminations, 90 Retirements	Reduction in System Growth*	Reduction in Salary Growth
Impact on Total Employer Contribution Rates					
Aggregate Rate	5.81%	-0.25%	+0.01%	N/A	-0.46%
100% Minimum Rate**	8.53%	-0.01%	0.00%	N/A	-0.26%
Impact on Funded Status					
Funded Status	111%	+0.3%	-0.2%	N/A	+0.6%

*System Growth assumption has no impact on the 2019 closed valuation. See explanation below.

**Calculated from Normal Cost of Entry Age Normal Cost Method.

Key Takeaways

The directional impact (cost or savings) of each scenario is dependent upon the members selected for each scenario.

- ❖ Termination of members who are early in their careers is a savings because these members will receive a lower benefit than if they remained active in the plan.
- ❖ More retirements of LEOFF 2 members than expected is a cost because they begin commencement of benefits earlier than we currently assume.
- ❖ Lowering future salary growth results in lower expected benefits upon retirement and is a savings to the plan. However, the system will also have lower future salary to collect contributions over, which creates a cost. The lower retirement benefit savings offset the cost from lower contributions to yield an overall contribution rate reduction.
- ❖ As of the delivery of this communication, our projections model based on the 2019 AVR is not complete. We will follow-up with analysis on the reduction in system growth for a future Board meeting.



Background Information – System Growth

The System Growth assumption reflects assumed growth in the LEOFF 2 active population. We use the System Growth assumption in our projection system, which estimates valuation results each year in the future after reflecting the growth in the active population. The projection system is used to estimate the future pathway of the plan, how risks may materialize, and long-term impacts of policies or assumptions. An example presented to the Board recently was the expected annual pathway of funded status under different minimum contribution rate policies.

The 2019 AVR is a closed valuation and changes to the System Growth assumption will not impact the results. A closed valuation relies on member data on a certain measurement date, June 30, 2019, in this case. The contribution rates, funded status, and other plan measures are determined for the population on that measurement date. The closed valuation does not consider any future benefits or salary from members that may join in the future. Put another way, we treat LEOFF 2 as a closed plan when performing the annual valuation. This means the contribution rates developed in the 2019 AVR are expected to fully fund all benefits from contributions collected over the careers of current members as of June 30, 2019.

The impact of a reduction in system membership growth will be realized in future AVRs as actual experience occurs. We can estimate the impact of lower system growth by looking at the results of our projection system; however, our 2019 projection system is not complete as of the September Board meeting so quantitative analysis was not available. We expect a reduction to this assumption would have a similar directional impact as the 700 Terminations scenario and lead to a modest decrease in contribution rates.

Disclosures

To perform this analysis, we made the following assumption, methodology, and data changes. Otherwise, we relied on the assumptions, methodology, and data documented in the 2019 AVR to prepare these estimates. Use of another set of assets, data, assumptions, and methods may also be reasonable, and might produce different results.

- ❖ **700 Terminations Scenario** – Based on your input, we assumed the 700 Seattle PD members with the least amount of service will no longer be active in LEOFF 2. Approximately half of this population had less than five years of service and would not be eligible for a monthly retirement benefit. For members not eligible for a future retirement benefit, we assumed they select a return of their contributions with interest (savings fund). If the member had accrued at least five years of service then we assumed they would defer their retirement benefit until normal retirement age (53).
- ❖ **90 Terminations, 90 Retirements Scenario** – Based on your input, we assumed the 90 Seattle PD members with the least amount of service within the plan will no longer be active in LEOFF 2. For members not eligible for a future retirement benefit, we assumed they



select a return of their contributions with interest (savings fund). We assumed the 90 oldest Seattle PD members eligible for retirement would immediately commence retirement.

- ❖ **Reduction in Salary Growth** - We assumed a lower future general salary growth of 3.25 percent (from 3.50 percent) for all active members.

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

Please let us know if we can be of any further assistance.

Sincerely,

Lisa Won, ASA, FCA, MAAA
Deputy State Actuary

cc: Kyle Stineman, ASA, MAAA
Senior Actuarial Analyst
Mitch DeCamp,
Senior Actuarial Analyst

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