

Actuary Report

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 State Actuary

Presentation to
 Washington State LEOFF Education Association



May 13, 2016

Today's Presentation

- Funded status
- COLA update and historical experience
- Merger
- Other items of interest?
- Q&A



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LEOFF 1 Funded Status

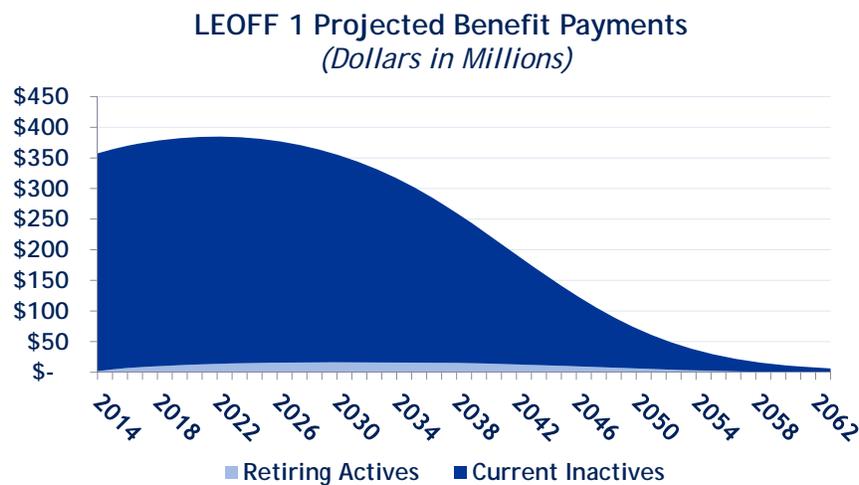
(Dollars in Millions)	LEOFF 1 at June 30, 2014*
a. Future value of fully projected benefits	\$11,022
b. Present value of fully projected benefits	\$4,332
c. Present value of accrued benefits	\$4,323
d. Market value of assets	\$5,719
e. Deferred asset gains/(losses)	\$220
f. Actuarial value of assets (d – e)	\$5,499
g. Unfunded liability (c – f)	(\$1,177)
h. Funded status (f ÷ c)	127%

Note: Totals may not agree due to rounding. Source: June 30, 2014, Actuarial Valuation Report.

*Accrued liabilities represent the present value of future benefits for current members earned at the valuation date assuming an expected rate of return on assets of 7.8% per year. Actuarial assets have been valued under the actuarial asset method (the "smoothing" method).

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Projected LEOFF 1 Benefit Payments (Future Value)



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Present Value of Future Benefits by Source

Present Value of Fully Projected Benefits	
(Dollars in Millions)	LEOFF 1
Active Members	
Retirement	\$141
Termination	0
Death	2
Disability	0
Return of Contributions on Termination	0
Return of Contributions on Death	\$0
Inactive Members	
Terminated	\$2
Service Retired	1,855
Disability Retired	1,760
Survivors	572
Laws of 2015	0
2014 Total	\$4,332

Note: Totals may not agree due to rounding.

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LEOFF 1 Funded Status at 6.8 Percent Interest Rate Assumption

(Dollars in Millions)	LEOFF 1 at June 30, 2014*
a. Accrued liability	\$4,738
b. Actuarial value of assets	\$5,499
c. Unfunded liability (a - b)	(\$761)
d. Funded status (b ÷ a)	116%

Note: Totals may not agree due to rounding. Source: OSA website, interactive reports.

*Accrued liabilities represent the present value of future benefits for current members earned at the valuation date assuming an expected rate of return on assets of 6.8% per year. All assets have been valued under the actuarial asset method (the "smoothing" method).

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LEOFF 1 Funded Status at 7.5 Percent Interest Rate Assumption

(Dollars in Millions)	LEOFF 1 at June 30, 2014*
a. Accrued liability	\$4,440
b. Actuarial value of assets	\$5,499
c. Unfunded liability (a - b)	(\$1,059)
d. Funded status (b ÷ a)	124%

Note: Totals may not agree due to rounding. Source: OSA.

*Accrued liabilities represent the present value of future benefits for current members earned at the valuation date assuming an expected rate of return on assets of 7.5% per year. All assets have been valued under the actuarial asset method (the "smoothing" method).

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LEOFF 1 Funded Status on a Market Value Basis

(Dollars in Millions)	LEOFF 1 at June 30, 2014*
a. Accrued liability	\$5,687
b. Market value of assets	\$5,719
c. Unfunded liability (a - b)	(\$32)
d. Funded status (b ÷ a)	101%

Note: Totals may not agree due to rounding. Source: OSA website, interactive reports.

*Accrued liabilities have been valued using an interest rate of 5% while assets at their market value. The 5% interest rate approximates the "risk free" rate of return on assets while maintaining consistency with the 3% inflation assumption used to project future benefit payments. This method was not used to determine contribution requirements.

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All Systems Funded Status

(Dollars in Millions)	Funded Status on an Actuarial Value Basis*									
	PERS		TRS		SERS	PSERS	LEOFF		WSPRS	Total
	Plan 1	Plan 2/3	Plan 1	Plan 2/3	Plan 2/3	Plan 2	Plan 1	Plan 2	Plan 1/2	
a. Accrued liability	\$12,720	\$29,321	\$9,250	\$9,819	\$3,965	\$291	\$4,323	\$8,069	\$1,042	\$78,800
b. Actuarial value of assets	\$7,761	\$26,386	\$6,353	\$9,193	\$3,624	\$278	\$5,499	\$8,638	\$1,044	\$68,777
c. Unfunded liability (a - b)	\$4,959	\$2,935	\$2,897	\$626	\$341	\$13	(\$1,177)	(\$569)	(\$2)	\$10,023
d. Funded status (b ÷ a)	61%	90%	69%	94%	91%	96%	127%	107%	100%	87%

Note: Totals may not agree due to rounding. Source: OSA website, interactive reports.

*Accrued liabilities represent the present value of future benefits for current members earned at the valuation date assuming an expected rate of return on assets of 7.8% per year (7.5% for LEOFF 2). All assets have been valued under the actuarial asset method (the "smoothing" method).

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Summary of Plan Participants

LEOFF 1 at June 30, 2014				
	Number	Average Age	Average Service	Average Salary/Benefits*
Actives	120	62.8	39.0	\$105,385
Annuitants				
Service Retirees	2,599	71.8	28.9	\$56,345
Retirees with Disabilities	3,460	70.9	20.7	\$41,890
Survivors	1,546	76.7	22.5	\$41,978

*Annualized.

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Summary of Plan Participants - Preliminary

LEOFF 1 at June 30, 2015				
	Number	Average Age	Average Service	Average Salary/Benefits*
Actives	82	63.6	39.6	\$106,683
Annuitants				
Service Retirees	2,557	72.4	29.2	\$58,417
Retirees with Disabilities	3,365	71.7	20.7	\$42,724
Survivors	1,585	77.3	22.6	\$42,874

*Annualized.

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Questions on Funded Status?



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LEOFF 1 COLA

- Defined under RCW 41.26.240
- 2015 COLA based on annual change in CPI from 2014 to 2015
- COLAs payable as of April 1, 2016

Retirement Dates	Adjustment
4/2/2015 – 3/31/2016	0.00%
1/1/2015 – 4/1/2015	0.91%
4/2/2014 – 12/31/2014	2.86%
Prior to 4/2/2014	0.91%

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LEOFF 1 CPI Defined

- CPI-W = Urban Wage Earners and Clerical Workers (Current Series)
- Not seasonally adjusted
- Area = Seattle-Tacoma-Bremerton
- Base = Alternate (Base Period = 1967)
- All items
- bls.gov/cpi/home



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Historical Inflation Assumptions for LEOFF 1

Valuation Years	Inflation Assumption
1974 - 1978	7% in 1975 grading to 3.50% in 1980
1979 - 1984	10% in 1980 grading to 5.00% in 1990
1985 - 1988	4.00%
1989 - 1994	5.00%
1995 - 1997	4.25%
1998 - 2013	3.50%
2013 - Present	3.00%

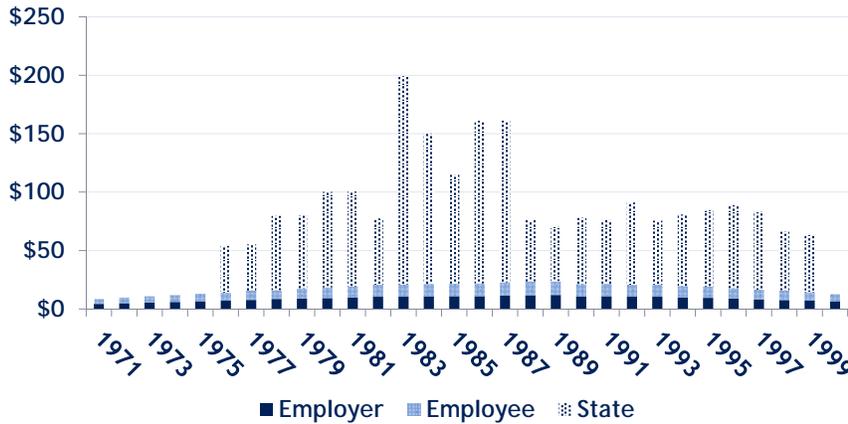
Note: Average annual inflation from 1974 to 2015 was 4.23%.

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Historical LEOFF 1 Funding

Total Employee, Employer, and State Contributions to LEOFF 1



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Questions on COLA or Historical Experience?



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Proposed Merger

- SB 6668 from the 2016 legislative session proposed the merger of the asset and liabilities of LEOFF 1 and TRS 1
- Bill also would provide a one-time, lump-sum payment of \$5,000 per eligible LEOFF 1 member
- Merger null and void if IRS determines the merger is in conflict with the internal revenue code and conflict cannot be remedied
- Other than \$5,000 payment, benefits unchanged under the bill
- No future contributions required from LEOFF 1 members or employers except the administrative rate charged by DRS to employers



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Highlights of Actuarial Analysis on Merger

- LEOFF 1 expected to have surplus at end of plan's life
 - If all assumptions realized, LEOFF 1 will have assets remaining after all benefits have been paid
- Merger applies expected surplus to future contribution requirements of the merged plan
 - Results in expected long-term employer savings of about \$2.1 billion over next 25 years
- Fiscal impact of merger will depend on future economic outlooks
 - Under a very pessimistic outlook, the merger results in a cost to employers of \$4.3 billion over the next 30 years
 - A very pessimistic or worse outlook occurs in 5 percent of our simulations of future economic outlooks
- Please see our actuarial fiscal note for SB 6668 for further details and supporting information

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TRS 1 Unfunded Actuarial Accrued Liability (UAAL), Before Merger

TRS 1 UAAL, Before Merger					
<i>(Dollars in Millions)</i>					
Year	Very Optimistic	Optimistic	Expected	Pessimistic	Very Pessimistic
2014	\$2,838	\$2,838	\$2,838	\$2,838	\$2,838
2017	\$2,640	\$2,875	\$3,063	\$3,237	\$3,500
2020	\$268	\$1,428	\$2,089	\$2,726	\$3,891
2023	N/A	N/A	\$1,117	\$2,461	\$4,210
2026	N/A	N/A	N/A	\$1,896	\$4,078
2029	N/A	N/A	N/A	\$1,037	\$3,423
2032	N/A	N/A	N/A	\$33	\$2,575
2035	N/A	N/A	N/A	N/A	\$1,253
2038	N/A	N/A	N/A	N/A	\$168
2041	N/A	N/A	N/A	N/A	N/A
2044	N/A	N/A	N/A	N/A	N/A
2047	N/A	N/A	N/A	N/A	N/A
2050	N/A	N/A	N/A	N/A	N/A

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LEOFF 1/TRS 1 UAAL, After Merger

LEOFF 1 / TRS 1 UAAL, After Merger					
<i>(Dollars in Millions)</i>					
Year	Very Optimistic	Optimistic	Expected	Pessimistic	Very Pessimistic
2014	\$1,670	\$1,670	\$1,670	\$1,670	\$1,670
2017	\$1,154	\$1,616	\$1,982	\$2,319	\$2,815
2020	N/A	N/A	\$1,016	\$2,323	\$4,642
2023	N/A	N/A	\$111	\$2,782	\$6,297
2026	N/A	N/A	N/A	\$2,954	\$6,532
2029	N/A	N/A	N/A	\$2,670	\$5,814
2032	N/A	N/A	N/A	\$1,894	\$5,078
2035	N/A	N/A	N/A	\$972	\$4,140
2038	N/A	N/A	N/A	\$39	\$3,131
2041	N/A	N/A	N/A	N/A	\$1,900
2044	N/A	N/A	N/A	N/A	\$305
2047	N/A	N/A	N/A	N/A	N/A
2050	N/A	N/A	N/A	N/A	N/A

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Contribution Rate Impacts From Merger

TRS 1 / LEOFF 1 Contribution Rates				
<i>(If all Assumptions are Realized)</i>				
Fiscal Year	LEOFF 1 Current Law	TRS 1 Current Law	TRS 1 / LEOFF 1	Difference
			Merged* After Merger	
2017	0.00%	6.23%	4.24%	(1.99%)
2018	0.00%	7.20%	4.24%	(2.96%)
2019	0.00%	7.20%	4.24%	(2.96%)
2020	0.00%	6.55%	4.24%	(2.31%)
2021	0.00%	6.55%	4.24%	(2.31%)
2022	0.00%	5.75%	4.24%	(1.51%)
2023	0.00%	5.75%	4.24%	(1.51%)
2024	0.00%	5.75%	1.18%	(4.57%)
2025	0.00%	5.75%	0.00%	(5.75%)
2026	0.00%	3.32%	0.00%	(3.32%)
2027	0.00%	0.00%	0.00%	0.00%

*Collected over TRS salaries only consistent with SB 6668.

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Budget Impacts From Merger

Budget Impacts - Varying Economic Scenarios					
(Dollars in Millions)	Very Optimistic	Optimistic	Expected	Pessimistic	Very Pessimistic
2016-2017					
General Fund	(\$75)	(\$75)	(\$75)	(\$75)	(\$75)
Non-General Fund	\$0	\$0	\$0	\$0	\$0
Total State	(\$75)	(\$75)	(\$75)	(\$75)	(\$75)
Local Government	(\$31)	(\$31)	(\$31)	(\$31)	(\$31)
Total Employer	(\$106)	(\$106)	(\$106)	(\$106)	(\$106)
2017-2019					
General Fund	(\$191)	(\$220)	(\$244)	(\$269)	(\$311)
Non-General Fund	\$0	\$0	\$0	\$0	\$0
Total State	(\$191)	(\$220)	(\$244)	(\$269)	(\$311)
Local Government	(\$78)	(\$90)	(\$100)	(\$110)	(\$127)
Total Employer	(\$269)	(\$310)	(\$343)	(\$379)	(\$438)
2016-2046					
General Fund	(\$418)	(\$1,034)	(\$1,477)	(\$1,024)	\$3,041
Non-General Fund	\$0	\$0	\$0	\$0	\$0
Total State	(\$418)	(\$1,034)	(\$1,477)	(\$1,024)	\$3,041
Local Government	(\$171)	(\$422)	(\$603)	(\$418)	\$1,242
Total Employer	(\$589)	(\$1,456)	(\$2,080)	(\$1,442)	\$4,283

Note: Assumes plan(s) will be funded at the actuarially required level and that no benefit improvements will occur in the future. No budget impacts to employees.
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Questions on Merger



Other Items of Interest?

- Select Committee on Pension Policy to study LEOFF merger this interim
 - Report to Legislature by beginning of 2017 Legislative Session
- Pension Funding Council will adopt contribution rates this summer and solicit outside audit of OSA work
 - Contribution rates effective for 2017-19 Biennium
 - Subject to revision by the Legislature
- New accounting standards for LEOFF 1 medical benefits coming
 - Proposed effective dates as early as 2017 for plan reporting; as early as 2018 for employer reporting
 - Changes similar to changes made for pension standards



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