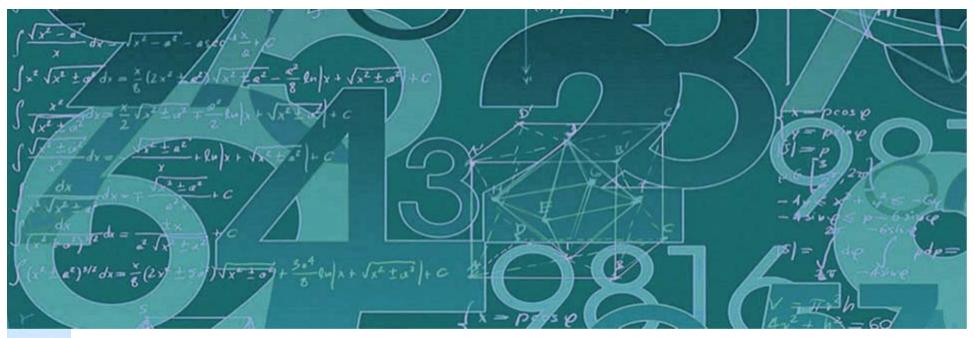
2019 LEOFF 2 Actuarial Valuation Results

Presentation to:

LEOFF Plan 2 Retirement Board

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 $\sqrt{x^2 \pm a} dx = -(2x^2 \pm a^2)$

May 27, 2020

Today's Presentation

Background on actuarial valuations
2019 Actuarial Valuation Report results
Scenario impacts from COVID-19
Informational — No Board action needed today



A Few Important Notes Before we get too Far...

- The 2019 valuation measures the system at June 30, 2019
- The results from the valuation will not include impacts from COVID-19
- All results are preliminary and currently under audit
- Preliminary results discussed today will include the new demographic assumptions
 - However, the Board has not yet adopted the new assumptions

Purpose of 2019 Valuation

- 1. Estimate future benefits to be paid from the plan
- 2. Calculate contribution rates that fund expected future benefits
 - o Rate setting valuation
- 3. Check funding progress



Highlights of 2019 Valuation

Participant Data

Plan membership is changing as expected

Assets

- Investment return of 8.89%, higher than assumed return of 7.40%
- Adjusted market value by \$300M for BIA asset transfer

Funded Status

• Funded status increased from 108% to 111%

Contribution Rates

 Rates decreased under Aggregate Cost Method and Minimum Contribution Rate policy

Preliminary Participant Data—Historical Trends

LEOFF 2				
	2016	2017	2018	2019
Actives				
Headcount	17,186	17,694	18,130	18,557
Average Annual Salary	\$103,900	\$106,200	\$109,300	\$114,100
Average Age	43.5	43.2	43.1	42.8
Average Service	14.5	14.2	13.9	13.6
Annuitants				
Headcount	4,259	4,851	5,436	6,064
Average Annual Benefit	\$44,700	\$46,700	\$48,800	\$50,900
Actives to Annuitants	4.0	3.6	3.3	3.1

Preliminary Changes in Market Value of Assets

LEOFF 2			
(Dollars in Millions)	2018	2019	
Beginning Market Value	\$11,758	\$12,985	
Contributions	372	393	
Disbursements	(270)	(316)	
Investments	1,125 [9.56%]	1,154 [8.89%]	
OSA Adjustments*	0	(300)	
Ending Market Value **	\$12,985	\$13,916	

Totals may not agree due to rounding.

*OSA adjusted the market value of assets to reflect transfer of \$300 million on

July 1, 2019, to the Benefit Improvement Account (BIA).

**June 30, 2019 Market Value excludes BIA value of \$22.04 million.

Calculation of Actuarial Value of Assets

MVA reported by DRS

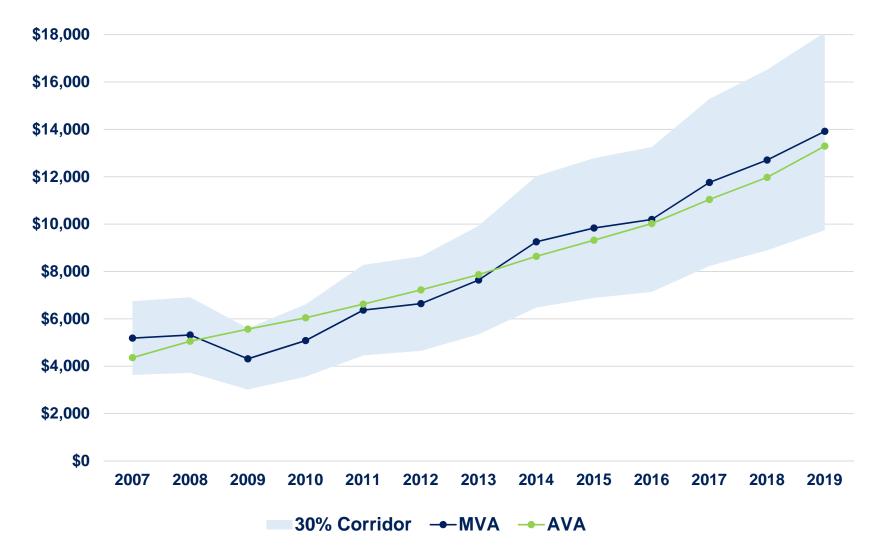
- Develop Actuarial Value of Assets (AVA) by smoothing past and current asset gains (or losses) from investments
 - Calculate 2019 asset gain (or loss) based on 7.4% expected return
 - Smooth gain (or loss) over a period up to 8 years
 - Smoothing method reduces contribution rate and funded status volatility

Calculating Preliminary 2019 AVA

Calculation of Actuarial Value of Assets				
LEOFF 2				
(Dollars in Millions)				6/30/2019
Market Value of	Assets			\$13,916
Plan Year	Return on	Years	Years	Amount
Ending	Assets	Deferred	Remaining	Deferred*
6/30/2019	8.89%	2	1	\$97
6/30/2018	9.56%	3	1	85
6/30/2017	14.14%	7	4	387
6/30/2016	2.48%	6	2	(166)
6/30/2014	18.93%	8	2	219
Total Deferral				623
Actuarial Value	of Assets**			\$13,294

*Amount of asset gains and (losses) left to recognize, or apply, in future valuations. **Actuarial Value of Assets can never be less than 70% (\$9,742) or greater than 130% (\$18,091) of the Market Value of Assets.

Actuarial Value of Assets Less Volatile Than Market Value



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Preliminary Liability Change from Last Valuation

LEOFF 2			
(Dollars in Millions)	2018	2019	Difference
Present Value of Future Benefits	\$14,846	\$16,113	\$1,267
Accrued Liability	\$11,066	\$12,003	\$937

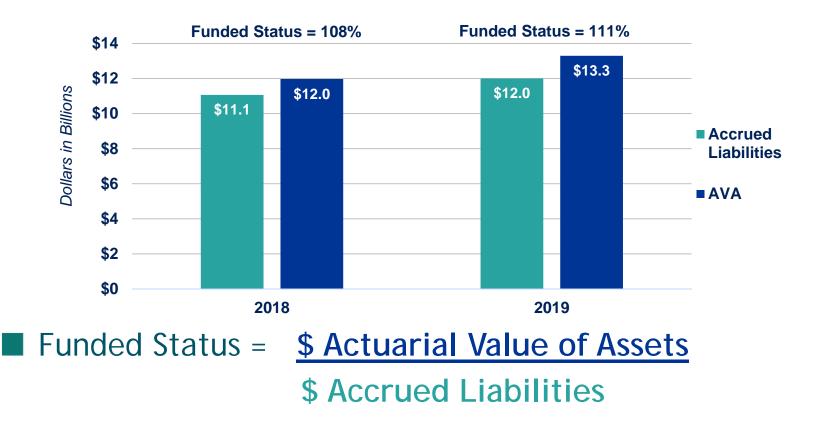
Present Value of Future Benefits

Today's value of all future expected benefits for current members

Accrued Liability

Today's value of all future plan benefits that have been accrued or "earned" as of the valuation date by current plan members

Preliminary Funded Status Change from Last Valuation



If the funded status exceeds 100%, the plan has more than \$1 of assets for every \$1 of accrued benefits

Preliminary Contribution Rate Changes

LEOFF 2 Member Contribution Rate			
	2018	2019	Difference
Aggregate Rate	6.58%	5.84%	(0.74%)
100% Minimum Rate*	8.67%	8.55%	(0.12%)
90% Minimum Rate*	7.81%	7.70%	(0.11%)
Adopted 2021-23	8.59%		

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

- Aggregate rates decrease from new demographic assumptions and recognition of positive investment experience
- Minimum rates decrease primarily from new demographic assumptions

Current Impacts from COVID-19

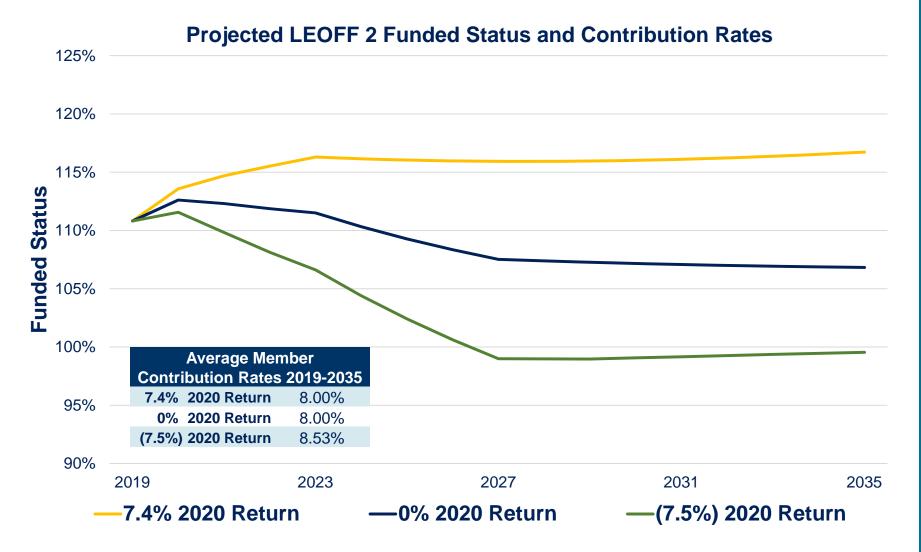
- 2020 return likely lower than 7.4% assumption
 - Measurement date is June 30, 2020
 - Fiscal year return through March about 0%
 - April has shown an increase from March
- Next rate setting cycle includes asset returns through June 30, 2021
- Economic experience study next year will consider impacts to investment return assumption

Projected Funded Status under Investment Return Scenarios

2020 Fiscal Year Investment Return			
	Scenario 1	Scenario 2	
Return	0%	(7.50%)	

- Scenario 1 estimates the March 30 return from WSIB
- Scenario 2 is approximately half the 2009 loss
- Projection methods and disclosures
 - Assumes 7.4% annual return starting in fiscal year 2021
 - Contribution rates adopted through 2023 are unchanged
 - Future contribution rates adopted according to policy
 - Excludes assets held in the Benefit Improvement Account

Preliminary Projected LEOFF 2 Funded Status under 2020 Return Scenarios



Long-Term Impacts from COVID-19

- Length and severity of bear market?
- Will there be a bounce back?
 - When and how large?
- Change in member behavior such as retirement or termination?
 - Difficult to know until experience filters into valuation data
 - Demographic experience study covering 2019-2025 will include data impacted by COVID

Summary of 2019 Actuarial Valuation and Scenario Analysis

- Long period of positive investment experience
 - AVA is deferring over \$600 million in investment gains
- The plan is considered healthy
 - Funded status exceeds 100%
 - Contribution rates remain stable
- LEOFF 2 has a solid foundation to weather an economic downturn
- New demographic assumptions provide best estimate of member behavior and slightly lower plan costs

Next Steps

- Demographic experience study assumptions available for adoption at the June meeting
- Final and audited contribution rates from the 2019 valuation available at the July meeting
 - Final rates include Board adoption of demographic assumptions
- New <u>COVID Impacts</u> webpage live now

More analysis coming later this summer

OSA available to provide additional analysis as needed

Questions? Please Contact: The Office of the State Actuary <u>leg.wa.gov/OSA; state.actuary@leg.wa.gov</u> 360-786-6140, PO Box 40914, Olympia, WA 98504 Mitch Decamp, Lisa Won

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May 27, 2020