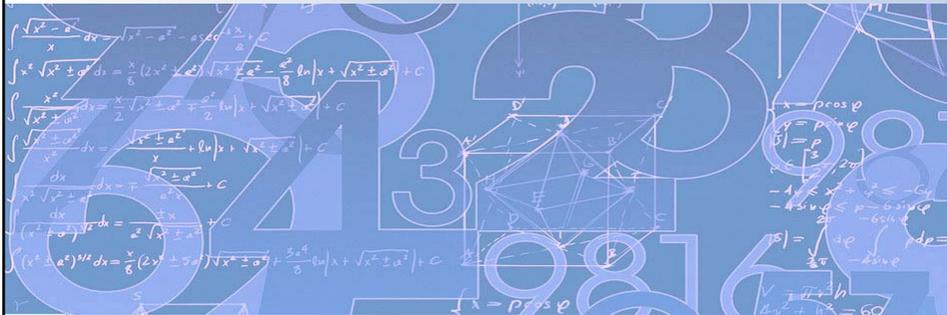


Merger Study – Actuarial Update

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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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Office of the State Actuary

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

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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.

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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			
<i>(Dollars in Millions)</i>			
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

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Budget Impact Of Merger Under Different Assumed Funding Policies

Budget Impact			
	Minimum Use	SB 6668 (2017)	Maximum Use
<i>(Dollars in Millions)</i>			
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.

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

25-Year Budget Impact By Return Scenario			
<i>(Dollars in Millions)</i> 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

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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

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Questions?



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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).

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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		TRS 1 / LEOFF 1 Merged*		
	LEOFF 1	TRS 1	Minimum Use	SB 6668 (2017)	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)					
Fiscal Year	Current Law		TRS 1 / LEOFF 1 Merged		
	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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