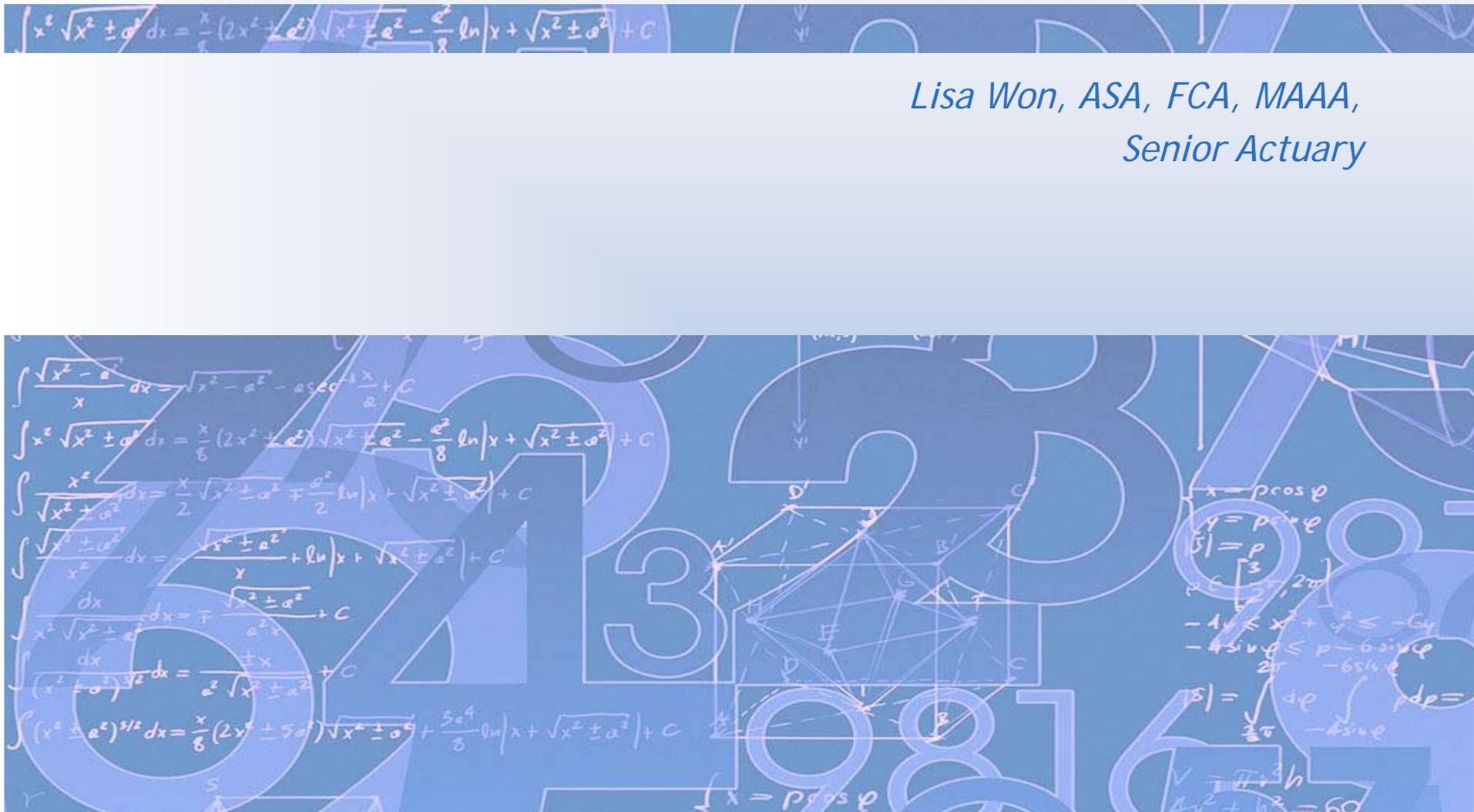


# LEOFF Plan 2 Experience Study And Actuarial Valuation Results Update

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## Today's Presentation

- Highlight changes from preliminary results
- Additional review of duty disability assumption
- Review contribution rates and budget impacts
- Decisions for today's meeting
- Update to administrative factors



## No Changes To The Preliminary Results

- Independent actuarial audit found demographic assumptions reasonable
  - Current method for setting base mortality assumption reasonable
    - Improvement suggested by Milliman
    - No impact to current results
    - OSA will implement in next experience study
- Audit of actuarial valuation results have found no material differences at this time

## Summary Of Updates To Current Assumptions

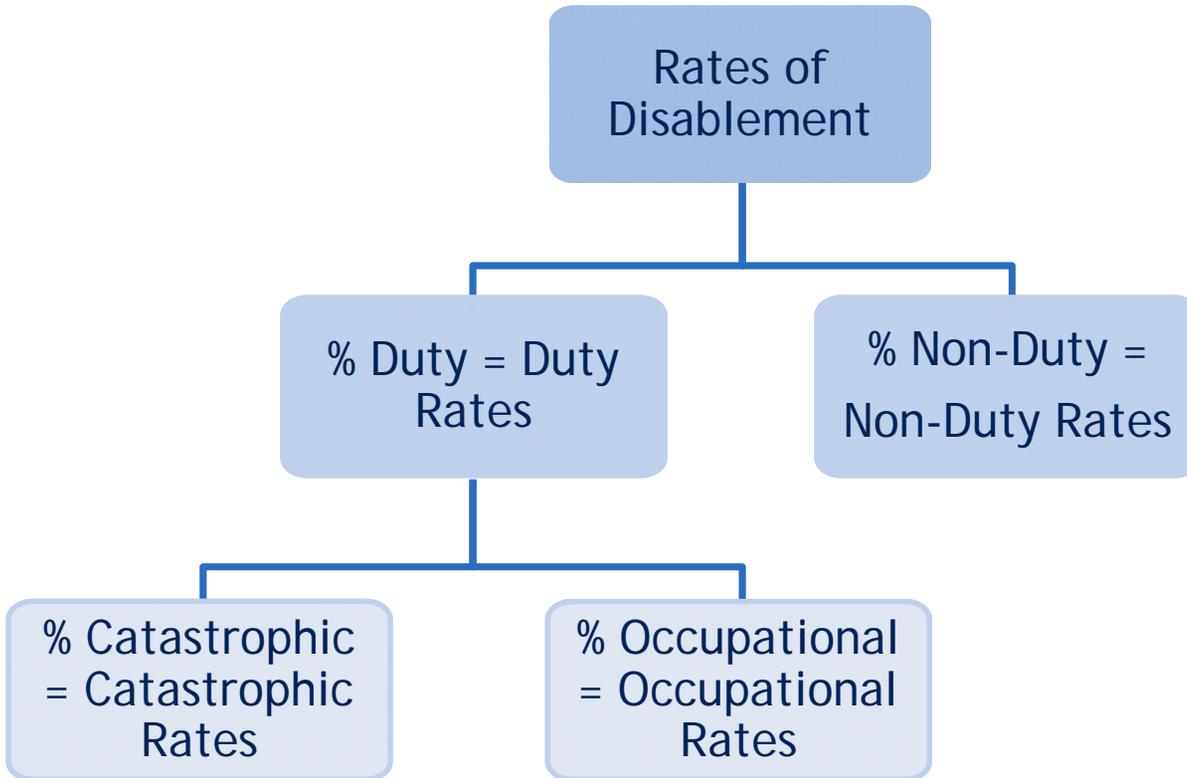
- Mortality
  - Changes to reflect lower mortality rates since last study
  - Updates to projected increases in life spans from 50 percent of Scale AA to 100 percent of Scale BB
  - Increases short-term costs
  - Most significant assumption change in this experience study
- Retirement
  - Changes to reflect later retirement
  - Decreases short-term costs
- Termination
  - Changes to reflect fewer terminations
  - Decreases short-term costs

## Summary Of Updates To Current Assumptions *(Continued)*

- Disability
  - Adjustments made to overall disability rates and percent duty disability
  - No changes made to percent total disability
  - Increases short-term costs
- Salary increases
  - Changes to “service based” salary increase assumptions
  - Lowered early career increases and extended salary scale
  - Increases short-term costs
- Miscellaneous assumptions
  - Increases short-term costs
- Full Experience Study Report available this fall



# Actuarial Model For Disability Benefits



## Duty Disability Assumption Developed By Occupation

- Current assumption developed after the 2007 expansion of occupational disease definition
- Assumes 100 percent of Fire Fighter (FF) disabilities are duty related
- Assumes Law Enforcement Officer (LEO) duty-related disabilities are 95 percent at age 20, decreasing to 70 percent at age 55
- Limited data available for this study
  - FF experience lower than current occupational assumption
  - LEO experience higher than current occupational assumption



## Duty Disability Experience By Occupation

### LEOFF 2 Disability Counts Among Fire Fighters by Year

Year*	All Disabilities	Duty Disabilities	Ratio
2005	12	10	0.83
2006	10	9	0.90
2008	11	9	0.82
2009	10	8	0.80
2010	8	7	0.88
2011	12	11	0.92
2012	5	4	0.80
<b>Total</b>	<b>68</b>	<b>58</b>	<b>0.85</b>

\*Omitted 2007 due to odd-length valuation period.

### LEOFF 2 Disability Counts Among Law Enforcement Officers by Year

Year*	All Disabilities	Duty Disabilities	Ratio
2005	12	8	0.67
2006	21	19	0.90
2008	15	10	0.67
2009	19	17	0.89
2010	15	13	0.87
2011	11	7	0.64
2012	5	3	0.60
<b>Total</b>	<b>98</b>	<b>77</b>	<b>0.79</b>

\*Omitted 2007 due to odd-length valuation period.

## Duty Disability Rates Apply To All Members

- Rates are blended and applied to the plan as a whole
- Current assumption is good overall fit
- Minor adjustment made to reflect change in percent of FF for the plan (from 43 percent to 45 percent)
- Development of assumption will be revisited next experience study with more data
  - Occupational assumption
  - Blended result



## Small Adjustment To Blended Duty Disability Rates\*

LEOFF 2 – Percent Of Disabilities That Are Duty Related 2005-2012			
Age	Actual	Old Assumption	New Assumption
20	0.00%	97.15%	97.25%
25	100.00%	95.71%	95.86%
30	100.00%	94.30%	94.50%
35	0.00%	92.85%	93.11%
40	100.00%	91.45%	91.75%
45	100.00%	88.60%	89.00%
50	80.00%	85.75%	86.25%
55	40.00%	82.90%	83.50%
60	80.00%	82.90%	83.50%
65	0.00%	82.90%	83.50%
70	0.00%	82.90%	83.50%

*\*Sample of rates shown. Rates vary by each age.*

## Duty Disability Rates Are Good Fit To Experience

LEOFF Plan 2 Duty Disability Experience					
2005-2012*					
Age	Actual	Old Expected	Old A/E	New Expected	New A/E
20-24	0	0	0.00	0	0.00
25-29	1	1	1.04	1	1.04
30-34	2	2	1.06	2	1.06
35-39	11	10	1.09	10	1.08
40-44	15	14	1.04	14	1.03
45-49	19	19	0.99	19	0.99
50-54	43	47	0.91	48	0.90
55-59	30	34	0.88	34	0.88
60-64	13	13	0.98	13	0.97
65+	1	1	1.21	1	1.20
<b>Total</b>	<b>135</b>	<b>142</b>	<b>0.95</b>	<b>143</b>	<b>0.95</b>

\*Omitted 2007 due to odd-length valuation period. Totals and ratios may not agree due to rounding.

## Actuarial Valuation Results – Funded Status

Funded Status At June 30		
<i>(Dollars in Millions)</i>		
	2013	2012
a. Present Value of "Earned" Benefits	\$6,859	\$6,071
b. Market Value of Assets	7,637	6,640
c. Deferred Gains/(Losses)	(225)	(581)
d. Actuarial Value of Assets (b-c)	7,862	7,222
e. Unfunded Liability (a-d)	(\$1,003)	(\$1,150)
f. Funded Ratio (d/a)	115%	119%

*Note: Totals may not agree due to rounding.*

## 2015-2017 Contribution Rate Options

Employee and Employer/State Contribution Rates				
	Adopted	Before ExpStudy 100% EANC	After ExpStudy 90% EANC	After ExpStudy 100% EANC
Employee	8.41%	8.60%	7.97%	8.85%
Employer*	5.05%	5.16%	4.78%	5.31%
State	3.36%	3.44%	3.19%	3.54%

*\*Excludes current administrative expense rate of 0.18%.*

## Budget Impacts For Next Two Biennia

- 2015-2017 and 2017-2019 budget impacts only
  - No long-term impacts provided
- Assumptions updated again in six years
- Actual costs based on actual benefits paid and actual investment returns on contributions made



## 2015-2017 and 2017-2019 Budget Impacts

	Increase in Budget		
	Before ExpStudy 100% EANC	After ExpStudy 90% EANC	After ExpStudy 100% EANC
<i>(Dollars in Millions)</i>			
<b>2015-2017</b>			
General Fund	\$3	(\$10)	\$13
Non-General Fund	\$0	\$0	\$0
Total State	\$3	(\$10)	\$13
Local Government	\$4	(\$15)	\$20
Total Employer	\$7	(\$24)	\$34
Total Employee	\$7	(\$24)	\$34
<b>2017-2019</b>			
General Fund	\$3	(\$11)	\$15
Non-General Fund	\$0	\$0	\$0
Total State	\$3	(\$11)	\$15
Local Government	\$5	(\$16)	\$22
Total Employer	\$8	(\$27)	\$37
Total Employee	\$8	(\$27)	\$37

*Budget impacts reflect difference between current contribution rates and the rates from the 2013 AVR only.*

*Totals may not agree due to rounding.*

## Contribution Rate Decision For This Meeting

- Maintain current rates through 2015-17
  - 8.41 percent Employee
- 90 percent EANC rate from 2013 AVR
  - 7.97 percent Employee
- 100 percent EANC rate from 2013 AVR
  - 8.85 percent Employee
- All options presented here are reasonable based on the current funding policy adopted by the Board



## Administrative Factors

- Consider updating when assumptions change
- OSA will begin process once all assumptions are final
  - Consult with DRS and LEOFF 2 Board
  - Calculate updated factors
- DRS implemented standardized adoption schedule
  - Allows time for public review and communicating to members
  - One year process from receiving new factors to implementing them
  - Goal is to adopt factors for an October 1 implementation
- Updated factors expected to be effective October 2016



# Questions?

