Estimated Costs of TRA Age 64 Normal Retirement Age (2053 Amortization)

	Adjusted Baseline 7.0%/2053 (1)	NRA 64	NRA 64 Add'l 1.5% Contrib Add'l \$145M
1. Actuarial accrued liability	33,599,623,000	34,506,435,000	34,506,435,000
2. Assets @ market value	25,592,152,000	25,592,152,000	25,737,152,000
3. Unfunded actuarial accrued liability	8,007,471,000	8,914,283,000	8,769,283,000
4. Funded ratio, market value (assets ÷ liabilities)	76.17%	74.17%	74.59%
5. Change in UAAL		906,812,000	(145,000,000)
6. Actuarially required contribution rate			
a. Normal cost	10.50%	11.24%	11.24%
b. Amortization of unfunded liability (2)	7.54%	8.39%	8.25%
c. Administrative expenses	<u>0.28%</u>	<u>0.28%</u>	<u>0.28%</u>
d. Total actuarially required rate	18.32%	19.91%	19.77%
7. Statutory rate, with future increases (3)	17.27%	17.27%	18.77%
8. Contribution Sufficiency/(Deficiency) (7 - 6.d.)	-1.05%	-2.64%	-1.00%

Estimated present value of employee payroll through 6/30/2053

106,199,880,637

Notes:

(1) Baseline adjusted has an investment return assumption of 7.0% & extends full funding date to 6/30/2053

(2) Change in UAAL is amortized over estimated present value of payroll through 6/30/2053

(3) This analysis assumes a full phase-in of scheduled contribution rate increases in the 2018 pension bill; additional 1.5%

contribution is assumed to be 1.0% Employer plus 0.5% Employee