

Notes to Schedule of Changes in Total OPEB Liability and Related Ratios

Valuation Date: June 30, 2017
Measurement Date: June 30, 2017

Methods and Assumptions Used to Determine Total OPEB Liability:

Actuarial Cost Method	Entry Age Normal.
Inflation	2.25%
Discount Rate	3.56%
Salary Increases	Salary increase rates used in the July 1, 2017 actuarial valuation of the Tennessee Consolidated Retirement System (TCRS); 3.44% - 8.72%, including inflation.
Retirement Age	Retirement rates used in the July 1, 2017 actuarial valuation of the Tennessee Consolidated Retirement System (TCRS). They are based on the results of a statewide experience study (undertaken on behalf of TCRS).
Mortality	Mortality tables used in the July 1, 2017 actuarial valuation of the Tennessee Consolidated Retirement System (TCRS). They are based on the results of a statewide experience study (undertaken on behalf of TCRS).
Healthcare Cost Trend Rates	Based on the Getzen Model, with trend starting at 7.50% for 2018 calendar year, and gradually decreasing 33-year period to an ultimate trend rate of 3.53% with 0.18% added to approximate the effect of the excise tax.
Aging factors	Based on the 2013 SOA Study "Health Care Costs - From Birth to Death".
Expenses	Administrative expenses are included in the per capita health costs.

Other Information:

Notes See the Actuarial Valuation Report as of July 1, 2017 (dated July 16, 2018).

Changes in assumptions and other inputs include the change in the discount rate from 2.92% as of the beginning of the measurement period to 3.56% as of June 30, 2017. This change is reflected in the Schedule of Changes in Total OPEB Liability.

There were no benefit changes during the measurement period.

Statement of OPEB Expense
Employer Fiscal Year Ended June 30, 2018
(Based on Measurement Year Ended June 30, 2017)

OPEB Expense

1. Service Cost	\$	2,649
2. Interest on the Total OPEB Liability		809
3. Current-Period Benefit Changes		0
4. OPEB Plan Administrative Expense		0
5. Recognition of Outflow/(Inflow) of Resources due to Liabilities		(116)
6. Total OPEB Expense	\$	3,342

Recognition of Deferred Outflows and Inflows of Resources

Differences between expected and actual experience and changes in assumptions are recognized in OPEB expense using a systematic and rational method over a closed period equal to the average of the expected remaining service lives of all employees that are provided with OPEB through the OPEB plan (active employees and inactive employees) determined as of the beginning of the measurement period.

At the beginning of the current measurement period, the average of the expected remaining service lives for purposes of recognizing the applicable combined deferred outflows and inflows of resources established in the current measurement period is 12.9 years.

**Statement of Remaining Deferred Outflows and
Inflows of Resources
Employer Fiscal Year Ended June 30, 2018
(Based on Measurement Year Ended June 30, 2017)**

A. Outflows and Inflows of Resources by Source to be Recognized in Current OPEB Expense

	Outflows of Resources	Inflows of Resources	Net Outflows of Resources
1. Differences between expected and actual experience	\$ 0	\$ 0	\$ 0
2. Changes in assumptions and other inputs	0	116	(116)
3. Total	\$ 0	\$ 116	\$ (116)

B. Average of the Expected Remaining Service Lives

12.9

C. Deferred Outflows and Deferred Inflows of Resources by Source to be Recognized in Future OPEB Expenses

	Deferred Outflows of Resources	Deferred Inflows of Resources	Net Deferred Outflows of Resources
1. Differences between expected and actual experience	\$ 0	\$ 0	\$ 0
2. Changes in assumptions and other inputs	0	1,376	(1,376)
3. Total	\$ 0	\$ 1,376	\$ (1,376)

D. Deferred Outflows and Deferred Inflows of Resources by Year to be Recognized in Future OPEB Expenses

	Year Ending June 30	Net Deferred Outflows of Resources
2019		\$ (116)
2020		(116)
2021		(116)
2022		(116)
2023		(116)
Thereafter		(796)
Total		\$ (1,376)

E. Estimated Outflow of Resources due to Contributions/Benefits Paid After the Measurement Date

\$ 45

Sensitivity of Total OPEB Liability and Other Relevant Information

Sensitivity of Total OPEB Liability to the Discount Rate Assumption

Regarding the sensitivity of the total OPEB liability to changes in the discount rate, the following presents the plan's total OPEB liability, calculated using a discount rate of 3.56%, as well as what the plan's total OPEB liability would be if it were calculated using a discount rate that is one percent lower or one percent higher:

1% Decrease	Current Discount Rate Assumption	1% Increase
2.56%	3.56%	4.56%
\$ 29,407	\$ 27,023	\$ 24,787

Sensitivity of Total OPEB Liability to the Discount Rate Assumption

Regarding the sensitivity of the total OPEB liability to changes in the healthcare cost trend rates, the following presents the plan's total OPEB liability, calculated using the assumed trend rates as well as what the plan's total OPEB liability would be if it were calculated using a trend rate that is one percent lower or one percent higher:

1% Decrease	Current Healthcare Cost Trend Rate Assumption	1% Increase
(6.00% to 3.77%)	(7.00% to 4.77%)	(8.00% to 5.77%)
\$ 23,165	\$ 27,023	\$ 31,674

Discount Rate

For plans that do not have formal assets, the discount rate should equal the tax-exempt municipal bond rate based on an index of 20-year general obligation bonds with an average AA credit rating as of the measurement date. For the purpose of this actuarial roll-forward, the municipal bond rate is 3.56% (based on the daily rate of Fidelity's "20-Year Municipal GO AA Index" closest to but not later than the measurement date). The discount rate was 2.92% as of the beginning of the measurement year.

Plan Assets

There are no plan assets accumulated in a trust that meets the criteria in paragraph 4 of GASB Statement No. 75.

Summary of Outstanding Outflows/(Inflows)

<u>Date Established</u>	<u>Source</u>	<u>Recognition Period (years)</u>	<u>Original Amount</u>	<u>Years Remaining</u>	<u>Amount Unrecognized Beg. of Period</u>	<u>Amount Recognized in Current Expense</u>	<u>Amount Deferred to Future Periods</u>
<u>Deferred Outflows of Resources</u>							
-	None	12.9	\$ -	N/A	-	\$ -	-
		SUBTOTAL:	-		-	-	-
<u>Deferred Inflows of Resources</u>							
6/30/2018	Assumption Changes	12.9	1,492	12.9	1,492	116	1,376
		SUBTOTAL:	1,492		1,492	116	1,376
GRAND TOTAL:			\$ 1,492		\$ 1,492	\$ 116	\$ 1,376