

State of South Carolina
Public Employee Benefit Authority
Basic Long-Term Disability Income Plan
GASB Statement No. 75 Accounting and Financial
Reporting for Postemployment Benefits Other Than
Pensions as of June 30, 2017





July 12, 2018

State of South Carolina
South Carolina Public Employee Benefit Authority
South Carolina Retirement Systems
P.O. Box 11960
Columbia, SC 29211

Dear Members of the Board:

This report provides information on behalf of the State of South Carolina Public Employee Benefit Authority (PEBA) in connection with the Governmental Accounting Standards Board (GASB) Statement No. 75 "Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions" for the Basic Long-Term Disability Income Plan.

The calculation of the liability associated with the benefits described in this report was performed for the purpose of satisfying the requirements of GASB Statement No. 75. The calculation of the plan's liability for this report is not applicable for funding purposes of the plan. A calculation of the plan's liability for purposes other than satisfying the requirements of GASB Statement No. 75 may produce significantly different results. This report may be provided to parties other than PEBA only in its entirety and only with the permission of PEBA. GRS is not responsible for unauthorized use of this report.

This report complements the actuarial valuation report as of June 30, 2016, provided for GASB Statement No. 74 purposes, which was also provided to the Board and should be considered together as a complete report for the measurement period that ended June 30, 2017. The total OPEB liability was rolled-forward from the valuation date to the plan's fiscal year end, June 30, 2017, using generally accepted actuarial principles. Please see the actuarial valuation report as of June 30, 2016 for additional discussion of the actuarial valuation, including the nature of actuarial calculations and more information related to participant data, economic and demographic assumptions, and benefit provisions.

This report is based upon information furnished by PEBA, which includes benefit provisions, membership information, and financial data. We did not audit this data and information, but we did apply a number of tests and concluded that it was reasonable and consistent. GRS is not responsible for the accuracy or completeness of the information provided by PEBA.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements; and changes in plan provisions or applicable law.

This report provides the Collective OPEB Amounts under GASB Statement No. 75 which will be allocated to participating employers. The proportionate share of the Collective OPEB Amounts for the participating employers is provided in the appendix to this report.

To the best of our knowledge, this report is complete and accurate and is in accordance with generally recognized actuarial practices and methods. Mr. Newton and Mr. Riazi are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein. Both consultants are experienced in performing valuations for large public retirement systems.

Respectfully submitted,

Gabriel, Roeder, Smith & Company



Joseph P. Newton, FSA, EA, MAAA
Senior Consultant



Mehdi Riazi, FSA, EA, MAAA
Consultant

Table of Contents

	<u>Page</u>
Section 1 Discussion.....	2
Section 2 Accounting Exhibits.....	5
Appendix A Allocation of the Net OPEB Liability, Contributions from Nonemployer Contributing Entities and OPEB Expense	
Appendix B Allocation of the Deferred Outflows and Inflows of Resources Related to OPEB	

SECTION 1



DISCUSSION

Discussion

Accounting Standards

GASB Statement No. 75 replaces the requirements of Statements No. 45, Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than OPEBs, as amended, and No. 57, OPEB Measurements by Agent Employers and Agent Multiple-Employer Plans, for OPEB.

Reporting under GASB 75 is effective for fiscal years commencing after June 15, 2017.

The following discussion provides a summary of the information that is required to be disclosed under this new accounting standard. A number of these disclosure items are provided in this report. However, certain information, such as notes regarding accounting policies and investments, is not included in this report. As a result, the employer is responsible for preparing and disclosing the non-actuarial information needed to comply with these accounting standards.

Financial Statements

GASB Statement No. 75 requires state and local government employers that participate in a cost-sharing multiple-employer plan to recognize a proportionate share of the collective net OPEB liability, collective OPEB expense, as well as deferred outflows of resources and deferred inflows of resources related to OPEB. The net OPEB liability is the difference between the total OPEB liability and the plan's fiduciary net position. In traditional actuarial terms, this is analogous to the accrued liability less the market value of assets.

GASB Statement No. 75 states the employer contributions made to the OPEB plan subsequent to the measurement date and before the end of the employer's reporting period should be reported as a deferred outflow of resources. The information contained in this report does not incorporate any employer contributions made subsequent to the measurement date of June 30, 2017.

Notes to Financial Statements

Paragraphs 89 through 98 of GASB Statement No. 75 discuss the note disclosures and RSI for cost-sharing employers. We recommend that employers review these paragraphs and also illustration 2 in Appendix C of GASB Statement No. 75, which provides a sample footnote disclosure for a cost-sharing employer.

Contributions from Nonemployer Contributing Entities

According to part (b) of paragraph 69 of GASB Statement No. 75, participating employers should recognize revenue in an amount equal to "the employer's proportionate share of the change in the collective net OPEB liability arising from contributions to the OPEB plan during the measurement period from nonemployer contributing entities for purposes other than the separate financing of specific liabilities to the OPEB plan." Each employer's proportionate share of the contributions from nonemployer contributing entities is provided in Appendix A of this report. As noted in question 4.200 of Implementation Guide No. 2017-3, "The employer should classify this revenue in the same manner as it classifies grants from other entities."

Timing and Frequency of the Actuarial Valuation

An actuarial valuation to determine the total OPEB liability is required to be performed at least every two years. For the employer's financial reporting purposes, the net OPEB liability and OPEB expense should be measured as of the employer's "measurement date" which may not be earlier than the employer's prior fiscal year end-date. If the actuarial valuation used to determine the total OPEB liability is not calculated as of the measurement date, the total OPEB liability is required to be rolled forward from the actuarial valuation date to the measurement date. The total OPEB liability shown in this report is based on an actuarial valuation performed as of June 30, 2016 and a measurement date of June 30, 2017. Please see the actuarial valuation report as of June 30, 2016 for additional discussion of the actuarial valuation, including the nature of actuarial calculations and more information related to participant data, economic and demographic assumptions, and benefit provisions.

Single Discount Rate

Projected benefit payments are required to be discounted to their actuarial present values using a Single Discount Rate that reflects (1) a long-term expected rate of return on OPEB plan investments (to the extent that the plan's fiduciary net position is projected to be sufficient to pay benefits) and (2) 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 (to the extent that the contributions for use with the long-term expected rate of return are not met).

For the purpose of this valuation, the expected rate of return on OPEB plan investments is 4.00%; the municipal bond rate is 3.56% (based on the daily rate closest to but not later than the measurement date of the Fidelity "20-Year Municipal GO AA Index"); and the resulting Single Discount Rate is 3.87%. The accounting policy for this plan is to set the Single Discount Rate equal to the prevailing municipal bond rate. Due to the plan's investment and funding policies, the difference between a blended discount rate and the municipal bond rate would be less than several basis points (several hundredths of one percent).

Methodology for Proportionate Shares

The proportionate share of the Collective OPEB Amounts for employers that participate in the cost-sharing multiple-employer retiree health care plan maintained by PEBA, are provided in Appendix A of this report. The allocation of the employers' proportionate share of the collective Net OPEB Liability and collective OPEB Expense was determined using the employers' premium contributions over the measurement period. This method is expected to be reflective of the employers' long-term contribution effort as well as be transparent to individual employers and their external auditors.

Summary of Population Statistics

The total OPEB liability described in this report is based on the plan membership as of July 1, 2016:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	993
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	-
Active Plan Members	<u>185,804</u>
Total Plan Members	186,797

Recognition of Deferred Outflows and Inflows of Resources

According to paragraph 86 of GASB Statement No. 75, *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 members) determined as of the beginning of the measurement period.

At the beginning of the 2017 fiscal year, the expected remaining service lives of all employees was approximately 1,859,935. Additionally, the total plan membership (active employees and inactive employees) was 186,797. As a result, the average of the expected remaining service lives for purposes of recognizing the applicable deferred outflows and inflows established in the current measurement period is 9.9570.

Additionally, differences between projected and actual earnings on OPEB plan investments should be recognized in OPEB expense using a systematic and rational method over a closed five-year period. For this purpose, the deferred outflows and inflows of resources are recognized in the OPEB expense as a level dollar amount over the closed period identified above.

Deferred Outflows and Inflows Specific to Cost-Sharing Employers

As noted in paragraph 64 of GASB Statement No. 75, the net effect of changes in the employer's proportionate share on the collective net OPEB liability and collective deferred outflows and deferred inflows of resources should be recognized in the employer's OPEB expense over a closed period.

According to paragraph 65 of GASB Statement No. 75, differences between (a) the amount of contributions from an employer and (b) the amount of the employer's proportionate share of the total of such contributions should be recognized in the employer's OPEB expense over a closed period.

These deferred outflows and inflows specific to cost-sharing employers are to be recognized over a period equal to the average of the expected remaining service lives of all employees (similar to differences between expected and actual experience and changes in assumptions). Amounts not recognized in the employer's expense should be reported as a deferred outflow or deferred inflow of resources related to OPEB. Appendix B provides the component of the current year's OPEB expense related to changes in proportionate shares and differences between employer contributions and proportionate share of plan contributions and also the deferred amounts remaining at the end of the measurement period. Note, the amounts provided in columns (17) through (22) of Appendix B include amounts related to these deferred outflows and inflows specific to cost-sharing employers.

SECTION 2

ACCOUNTING EXHIBITS

Exhibit 1

Schedule of the Employers' Collective Net OPEB Liability

Fiscal Year Ending	Total OPEB Liability	Plan Fiduciary Net Position	Employers Net OPEB Liability (Asset)	Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability
(1)	(2)	(3)	(4)	(5)
June 30, 2017	\$ 38,510,568	\$ 36,697,589	\$ 1,812,979	95.29%

Exhibit 2

Schedule of Changes in the Employers' Collective Net OPEB Liability for the Measurement Period Ending June 30, 2017

Total OPEB liability	
Service cost	\$ 7,952,412
Interest on the total OPEB liability	1,399,527
Changes of benefit terms	0
Difference between expected and actual experience of the total OPEB liability	0
Changes of assumptions	(182,868)
Benefit payments	(8,205,609)
Net change in total OPEB liability	<u>963,462</u>
Total OPEB liability – beginning	<u>37,547,106</u>
Total OPEB liability – ending	<u><u>\$ 38,510,568</u></u>
Plan fiduciary net position	
Contributions – employer	\$ 7,288,566
Contributions – nonemployer contributing entities	400,000
Contributions – employee	0
Net investment income	371,679
Benefit payments	(8,205,609)
OPEB plan administrative expense	(10,000)
Other	0
Net change in plan fiduciary net position	<u>(155,364)</u>
Plan fiduciary net position – beginning	<u>36,852,952</u>
Plan fiduciary net position – ending	<u>\$ 36,697,589</u>
Net OPEB liability	<u><u>\$ 1,812,979</u></u>
Plan fiduciary net position as a percentage of the total OPEB liability	95.29 %

Recognition of Deferred Outflows and Inflows of Resources

According to paragraph 86 of GASB Statement No. 75, *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 members) determined as of the beginning of the measurement period.

At the beginning of the 2017 fiscal year, the expected remaining service lives of all employees was approximately 1,859,935. Additionally, the total plan membership (active employees and inactive employees) was 186,797. As a result, the average of the expected remaining service lives for purposes of recognizing the applicable deferred outflows and inflows established in the current measurement period is 9.9570.

Additionally, differences between projected and actual earnings on OPEB plan investments should be recognized in OPEB expense using a systematic and rational method over a closed five-year period. For this purpose, the deferred outflows and inflows of resources are recognized in the OPEB expense as a level dollar amount over the closed period identified above.

Exhibit 3

Statement of Outflows and Inflows Arising from Current Reporting Period For Fiscal Year Ending June 30, 2017

	Recognition Period (or amortization years)	Total (Inflow) or Outflow	2017 Recognized in current OPEB expense	Deferred (Inflow) or Outflow in future expense
<u>Due to Liabilities:</u>				
Differences in expected and actual experience	9.9570	\$ 0	\$ 0	\$ 0
Assumption changes	9.9570	\$ (182,868)	\$ (18,366)	\$ (164,502)
<u>Due to Assets:</u>				
Net Difference between projected and actual earnings on OPEB plan investments	5.0000	\$ 1,091,898	\$ 218,380	\$ 873,518
Total		\$ 909,030	\$ 200,014	\$ 709,016

This table is not a required disclosure. Exhibit 3 is provided to document sources of the new deferred inflows and outflows resulting from the current reporting year.

Exhibit 4

Components of Collective OPEB Expense for the Fiscal Year Ending June 30, 2017

1. Service Cost	\$	7,952,412
2. Interest on the Total OPEB Liability		1,399,527
3. Current-Period Benefit Changes		0
4. Employee Contributions (made negative for addition here)		0
5. Projected Earnings on Plan Investments (made negative for addition here)		(1,463,577)
6. OPEB Plan Administrative Expense		10,000
7. Other Changes in Plan Fiduciary Net Position		0
8. Recognition of Outflow (Inflow) of Resources due to Liabilities		(18,366)
9. Recognition of Outflow (Inflow) of Resources due to Assets		218,380
10. Total OPEB Expense	\$	8,098,376

Exhibit 5

Deferred Outflows and Inflows Related to OPEB

	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference between expected and actual experience	\$ 0	\$ 0
Changes in assumptions	\$ 0	\$ 164,502
Net difference between projected and actual earnings on OPEB plan investments	\$ 873,518	\$ 0
Changes in proportion and differences between contributions and proportionate share of contributions	TBD	TBD
Contributions subsequent to the measurement date	TBD	
Total	\$ 873,518	\$ 164,502

The table above provides the collective Deferred Inflows and Outflows of resources remaining as of the measurement date. The deferred inflows/outflows related to changes in proportion, differences between contributions and proportionate share of contributions, and contributions subsequent to the measurement date are specific to each employer.

The deferred inflows/outflows recognized in the current year's OPEB expense that are related to changes in proportion and differences between contributions and proportionate share of contributions are provided in Appendix B.

Employer contributions made subsequent to the measurement date of the total OPEB liability (June 30, 2017) and prior to the end of the employer's reporting period should be reported by the employer as a deferred outflow related to OPEB. See paragraph 68 of GASB Statement No. 75 for cost-sharing employers.

Exhibit 6

Collective Deferred Outflows and Inflows to be recognized in Future OPEB Expense

Year Ending June 30	Net Deferred Outflows (Inflows)
2018	\$ 200,014
2019	\$ 200,014
2020	\$ 200,014
2021	\$ 200,012
2022	\$ (18,366)
Thereafter	\$ (72,672)
Total	\$ 709,016

Exhibit 7

Statement of Deferred Outflows and Inflows of Resources by Year to be recognized in Future OPEB Expense

	Recognition Period (or amortization years)	Total (Inflow) or Outflow at Beginning of Measurement Period	Measurement Year							Total remaining (Inflow) or Outflow at End of Measurement Period
			2017	2018	2019	2020	2021	2022	Thereafter	
Due to Liabilities:										
Differences in Experience										
2017	9.9570	0	0	0	0	0	0	0	0	0
Total			\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	
Assumption Changes										
2017	9.9570	(182,868)	(18,366)	(18,366)	(18,366)	(18,366)	(18,366)	(18,366)	(72,672)	(164,502)
Total			\$ (18,366)	\$ (18,366)	\$ (18,366)	\$ (18,366)	\$ (18,366)	\$ (18,366)	\$ (72,672)	
Due to Assets:										
Investment Experience										
2017	5.0000	1,091,898	218,380	218,380	218,380	218,380	218,378	0	0	873,518
Total			\$ 218,380	\$ 218,380	\$ 218,380	\$ 218,380	\$ 218,378	\$ 0	\$ 0	
Total Recognized in Future Expense				\$ 200,014	\$ 200,014	\$ 200,014	\$ 200,012	\$ (18,366)	\$ (72,672)	\$ 709,016

This table is not a required disclosure. Exhibit 7 is provided to document all sources of collective deferred inflows and outflows.

Exhibit 8

Actuarial Assumptions and Methods

Methods and Assumptions

Actuarial Cost Method	Entry Age Normal
Inflation	2.25%
Investment Rate of Return	4.00%, net of plan investment expense, including inflation
Single Discount Rate	3.87% as of June 30, 2017
Salary, Termination Rates and Retirement Rates	Based on the experience study performed for the South Carolina Retirement Systems for the 5-year period ending June 30, 2015.
Disability Incidence	The disability incidence rates used in the LTD valuation are based on the rates developed for the pension plans.
Disability Recovery	For participants in payment, 1987CGDT Group Disability For active employees, 60% were assumed to recover after the first year and 92% were assumed to recover after the first two years.
Offsets	40% are assumed to be eligible for Social Security benefits. Assumed percentage who will be eligible for a pension plan offset varies based on employee group.
Expenses	Investment expenses are net of the investment returns; Third party administrative expenses are included in the benefit projections.

Other Information:

Notes	There were no benefit changes during the year. The single discount rate changed from 3.74% as of June 30, 2016 to 3.87% as of June 30, 2017.
-------	---

Exhibit 9

Asset Allocation and Real Return Assumptions

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return	Allocation-Weighted Long-Term Expected Real Rate of Return
U.S. Domestic Fixed Income	80.00 %	2.09 %	1.67 %
Cash	20.00 %	0.84 %	0.17 %
Total	100.00 %		1.84 %
Expected Inflation			2.25 %
Total Return			4.09 %
Investment Return Assumption			4.00 %

Exhibit 10

Sensitivity of the Collective Net OPEB Liability to Changes in the Discount Rate

Regarding the sensitivity of the net OPEB liability to changes in the Single Discount Rate, the following presents the plan's net OPEB liability, calculated using a Single Discount Rate of 3.87%, as well as what the plan's net OPEB liability would be if it were calculated using a Single Discount Rate that is one percent lower or one percent higher:

1% Decrease 2.87%	Current Single Discount Rate Assumption 3.87%	1% Increase 4.87%
\$ 3,225,261	\$ 1,812,979	\$ 426,690

APPENDIX A

ALLOCATION OF THE NET OPEB LIABILITY, CONTRIBUTIONS FROM NONEMPLOYER CONTRIBUTING ENTITIES AND OPEB EXPENSE

APPENDIX B

ALLOCATION OF THE DEFERRED OUTFLOWS AND INFLOWS OF RESOURCES RELATED TO OPEB