

Teachers' Retirement Insurance Program of the State of Illinois

GASB Statements No.74 and 75

Accounting and Financial Reporting for
Postemployment Benefits Other than Pensions

Actuarial Valuation Report as of
June 30, 2016



October 31, 2017

Department of Central Management Services
401 South Spring Street
Springfield, Illinois 62706

Subject: GASB Nos. 74 and 75 Actuarial Valuation as of June 30, 2016, for Illinois TRIP

Submitted in this report are the results of the actuarial valuation as of June 30, 2016, of the liabilities associated with the employer financed retiree health benefits provided through the State of Illinois Teachers' Retirement Insurance Program (TRIP), a benefit plan designed to provide postemployment healthcare benefits to certain members receiving pension benefits under the Teachers' Retirement System of Illinois (TRS).

This report was prepared at the request of the Department of Central Management Services (CMS) and is intended for use by CMS and those designated or approved by CMS. This report may be provided to other parties only in its entirety and only with the permission of CMS.

The actuarial valuation as of June 30, 2016, was prepared for purposes of complying with the requirements of Statements No. 74 and 75 of the Governmental Accounting Standards Board (GASB). The calculations reported herein have been made on a basis consistent with our understanding of these accounting standards. Determinations of the liability associated with the benefits described in this report for purposes other than satisfying the financial reporting requirements of TRIP and participating employers may produce significantly different results. The valuation was based upon:

- Census information used in the June 30, 2016, TRS pension valuation as provided by the System's actuary and TRS;
- Healthcare data and census data as of June 30, 2016, for TRIP as provided by the Department of Central Management Services (CMS);
- Average per member costs by plan type for the period July 1, 2016, through June 30, 2017, as calculated by the State's healthcare actuary and provided by CMS;
- Substantive plan information provided by TRS and CMS;
- Demographic assumptions consistent with the TRS actuarial valuation as of June 30, 2016, including updates to pension-related assumptions since the last OPEB actuarial valuation as of June 30, 2014;
- Economic assumptions approved by the State, including a discount rate of 2.85 percent as of June 30, 2016, and 3.56 percent as of June 30, 2017, which comply with the requirements of GASB Nos. 74 and 75;
- An ultimate trend rate assumption of 4.50 percent for post-Medicare coverage and 5.09 percent for non-Medicare coverage, which reflects the impact of the excise tax under healthcare reform; and
- Other healthcare-related assumptions recommended by GRS and approved by the State.

We checked for internal and year-to-year consistency, but did not audit the data. We are not responsible for the accuracy or completeness of the information provided by TRS or CMS. Authorization of the assumptions and methods applicable to this valuation was granted by the State, and they are disclosed in the assumptions and methods section of this report.

The Net OPEB Liability and Annual OPEB Expense were developed in accordance with the requirements of GASB Statements No. 74 and 75, and are applicable only for financial reporting purposes. The Net OPEB Liability and annual OPEB Expense disclosed in this report should not be used to assess the level of plan assets needed to settle the plan's benefit obligations or the annual actuarially determined contributions needed to fund future benefit obligations.

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; and changes in plan provisions or applicable law. Due to the limited scope of the actuary's assignment, the actuary did not perform an analysis of the potential range of such future measurements.

The signing actuaries are independent of the plan sponsor.

To the best of our knowledge the information contained in this report is accurate and fairly presents the actuarial position of TRIP as of the valuation date. All calculations have been made in conformity with generally accepted actuarial principles and practices, with the Actuarial Standards of Practice issued by the Actuarial Standards Board and with applicable statutes.

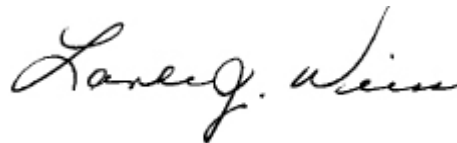
Alex Rivera and Lance J. Weiss are Members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Respectfully submitted,



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Senior Consultant



Lance J. Weiss, EA, MAAA, FCA

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SECTION A

EXECUTIVE SUMMARY

Executive Summary

Introduction

The Governmental Accounting Standards Board (GASB) has issued accounting standards, Statements No. 74 and 75, relating to Other Postemployment Benefits (OPEB). For the participating members of the Teachers' Retirement Insurance Program of Illinois (TRIP), OPEB primarily include medical and prescription drug insurance benefits provided to former public school employees and their spouses receiving pension benefits under the Teachers' Retirement System of Illinois (TRS). Any other OPEB offered to the members of the Teachers' Retirement System of Illinois are outside the scope of this report. For example, OPEB offered by the local school districts such as vision, dental, life insurance or explicit healthcare subsidies to help defray the costs of the retiree's share of the TRIP premium, are not reflected in this valuation.

The purpose of this Report is to provide: (a) results of the actuarial calculations necessary for financial reporting pursuant to GASB Statements No. 74 and 75 and (b) various other actuarial, statistical and benefit information useful to management for the operation of TRIP.

We understand TRIP is a cost-sharing multiple employer plan and as of June 30, 2016, 975 employers are participating in the plan.

Funded and Unfunded Plans

Currently, benefits offered through TRIP are financed through a combination of retiree premiums and percentage-of-payroll contributions from active employees, local school districts, the State, and subsidies from the Federal Government. Contributions are made to the Teacher Health Insurance Security Fund. For fiscal year 2017, active members contribute 1.12 percent of pay, school districts contribute 0.84 percent of pay and the State contributes 1.12 percent of pay. Retired members contribute through premium payments based on the coverage elected, Medicare eligibility, and the age of the member and dependents. The premium for retired members is not permitted to increase by more than 5.0 percent per year by statute. The Federal Government provides a Medicare Part D subsidy.

The current objective is to fund the Trust in order to maintain benefits through individual annual periods with appropriate margins for incurred but not paid liabilities. That is, there is no arrangement into which the participating employers would make contributions to advance-fund the obligation. However, a Trust does exist into which participating employers are making contributions that have historically marginally exceeded the annual expected net claim payments. However, this trust has a negative asset balance of \$(59) million as of June 30, 2016, and \$(41) million as of June 30, 2017. Historically, these assets have been invested in cash and other short-term investments according to the current investment policy, and benefit obligations are effectively funded on a pay-as-you-go basis.

Consequently, according to GASB Statements No. 74 and 75, the discount rate used to calculate the present values and costs of the OPEB, for programs funded on a pay-as-you-go basis, should be consistent with an index of high quality 20-year general obligation bonds as of the measurement date. For this purpose, the plan sponsor has selected an interest discount rate of 2.85 percent as of June 30, 2016, and 3.56 percent as of June 30, 2017.

There is no current requirement by State or Federal Statute or regulation to pre-fund the OPEB obligations with real cash in a Trust. GASB Statements No. 74 and 75 only require the measurement and

Executive Summary

recognition of the Net OPEB Liability, Annual OPEB Expense and disclosure in the financial statements, as applicable.

Results of the Study

The previous actuarial valuation as of June 30, 2014, was used for the plan's financial reporting under GASB No. 43, and required:

- A discount rate consistent with the expected long-term return on assets used to finance benefits. For this purposes the sponsor selected a long-term assumed return of 4.5 percent.
- The Projected Unit Credit cost method

The actuarial valuation as of June 30, 2016, for purposes of financial reporting under GASB Nos. 74 and 75 requires:

- If benefits are funded on a pay-as-you-go basis, a discount rate based on the expected return for an index of high-quality 20-year general obligation bonds. For this purpose the sponsor selected a discount rate of 2.85 percent as of June 30, 2016, and 3.56 percent as of June 30, 2017.
- The Entry Age Normal cost method

The following table shows a reconciliation of the Actuarial Accrued Liability since the last actuarial valuation:

Reconciliation of the Change in Actuarial Accrued Liability (\$ in millions)

1. Actual Actuarial Accrued Liability at June 30, 2014	\$ 18,759.78
2. Expected Actuarial Accrued Liability at June 30, 2016	\$ 21,596.55
(Gain)/Loss due to:	
Demographic Experience	\$ (688.71)
Change in Pension and OPEB related assumptions	1,341.33
Change in Cost Method and Interest Rate due to GASB 74/75	<u>1,743.51</u>
Total	\$ 2,396.13
4. Actual Actuarial Accrued Liability at June 30, 2016	\$ 23,992.68

The actuarial Accrued Liability as of June 30, 2016, using a discount rate of 3.56 percent, is projected to June 30, 2017, for GASB Nos. 74 and 75 financial reporting.

Liabilities decreased more than expected due to the following reasons:

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- Favorable demographic experience;
- Favorable claims experience compared with assumed trend rates from the previous valuation; and
- Change in cost method Projected Unit Credit to Entry Age Normal.

The decrease in liabilities was offset by the following factors:

- Changes in pension-related demographic assumptions; and
- Changes in OPEB-related assumptions including decreasing the discount rate from 4.50 percent to 3.85 percent.

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In fiscal year 2017, employer costs, as reported in the fiscal year 2017 financial statements of the State and TRIP, and information provided by CMS, were allocated as follows:

Stakeholder/ Revenue Source	2017 Cost Sharing (\$ in millions)	Percent of Total Revenue	Statutory Requirement FY 2017	Statutory Requirement FY 2018
State	\$ 109.70	24.3%	1.12% of pay	1.18% of pay
School Districts	100.76	22.3%	0.84% of pay	0.88% of pay
Federal Part-D Subsidy	2.05	0.5%	Percent of Rx Claims Paid	Percent of Rx Claims Paid
Active Members	111.73	24.8%	1.12% of pay	1.18% of pay
Retirees	126.84	28.1%	Percent of premium	Percent of premium
COBRA	0.05	0.0%		
Total	\$ 451.13	100.0%		
Benefits and Expenses Paid	\$ 437.11			
Benefits and Expenses Covered by Revenue	103%			

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Actuarial Assumptions

In any long-term actuarial valuation (such as for Pensions and OPEBs), certain demographic, economic and behavioral assumptions are made concerning the population, the investment discount rates and the benefits provided. These actuarial assumptions form the basis for the actuarial model which is used to project the future population, the future benefits provided and the future contributions collected. The discount rate assumption is used to discount projected net OPEB benefits to a present value. This and other related present values are used to calculate the Annual OPEB Expense and the Net OPEB Liability that will be disclosed in the Plan's and Plan Sponsor's financial statements.

This actuarial valuation of TRIP is similar to the actuarial valuation performed for the TRS pension plan. The demographic assumptions (rates of retirement, termination and disability) used in this OPEB valuation were identical to those used in the latest TRS valuation.

The following TRS pension-related assumption changes were made since the last OPEB actuarial valuation as of June 30, 2014, that would impact the OPEB actuarial valuation as of June 30, 2016:

- Price inflation was decreased from 3.00 percent to 2.50 percent;
- Individual salary increase rate per year was decreased by 0.50 percent to reflect the decrease in price inflation;
- Mortality table was changed to the RP 2014 White Collar table, adjusted for TRS experience, and includes the MP-2014 mortality projection scale;
- The rates of retirement, termination and disability were updated to reflect recent experience;
- Individual salary increases were decreased based on observed experience and future expectation; and
- Optional service assumption was decreased.

Certain assumptions are unique to healthcare benefits. These assumptions include the healthcare trend, per capita claim costs and the likelihood that a member selects healthcare coverage. Section E of this Report titled, "Summary of Actuarial Assumptions and Methods" contains a detailed discussion and disclosure of all the relevant actuarial assumptions and methods used in this valuation.

The following OPEB-related assumption changes were made since the last actuarial valuation as of June 30, 2014:

- The discount rate was changed from 4.50 percent to 2.85 percent at June 30, 2016, and 3.56 percent at June 30, 2017;
- The healthcare trend assumption was updated based on claim and enrollment experience through June 30, 2016, projected plan cost for plan year end June 30, 2017, premium changes through plan year end 2018, and expectation of future trend increases after June 30, 2017;
- The Excise Tax trend adjustment was updated based on available premium and enrollment information as of June 30, 2017;
- Per capita claim costs for plan year end June 30, 2017, were updated based on projected claims and enrollment experience through June 30, 2017, and updated premium rates through plan year 2018;
- The morbidity factors, used to adjust per capita claim cost by age and gender, were updated; and
- Healthcare plan participation rates by plan were updated based on observed experience.

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Adjustments to the Estimated Impact of Excise Tax under Healthcare Reform

Beginning in 2020, the Patient Protection and Affordable Care Act (PPACA) imposes a 40 percent excise tax on healthcare plan costs over certain statutory limits. The annual statutory limits for 2018 depend on the age and coverage tier as follows:

	Age less than 55 or greater than 64	Age greater than 54 or less than 65
Single person coverage	\$10,200	\$11,850
All other coverage types	\$27,500	\$30,950

In 2019 and 2020, the statutory limits are increased by the rate for the Consumer Price Index for all Urban Consumers (CPI-U) plus one percentage point, and after 2020 the statutory limits are increased by the CPI-U rate. The statutory limits don't recognize differences due to region, health status of the group or plan design. Healthcare plan costs may be blended among active members, non-Medicare retirees and Medicare retirees if members are covered by the same plan, and similar benefits are provided. Healthcare plan costs subject to the excise tax include: medical, prescription and employer Health Savings Accounts and Health Reimbursement Accounts.

Beginning with the valuation as of June 30, 2011, the impact of the excise tax was estimated by:

- 1) Aggregating average costs by the PPO plans and the HMO plans;
- 2) Projecting average plan costs based on the assumed valuation trend rate;
- 3) Projecting the statutory limits assuming a CPI-U rate of 3.0 percent;
- 4) Estimating the projected excise tax based on the projected average costs and statutory limits;
- 5) Assuming the plan sponsor would subsidize the excise tax and no additional costs would be passed to plan members; and
- 6) Developing an adjusted trend rate, applied to the explicit costs, to approximate the impact of the additional excise tax costs.

Based on the preceding method, the trend rates for non-Medicare medical and prescription drug costs were increased by an additional 0.59 of a percentage point on and after 2018. Trend rates for Medicare medical and prescription drug costs were not adjusted because of the decrease in costs after the adoption of the MAPD plans.

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Actuarial Cost Methods

The actuarial valuation results are based on the Entry Age Normal cost method as required by GASB Nos. 74 and 75.

The remainder of the report is an integral component of the actuarial valuation and includes:

- Key actuarial valuation results;
- An overview of the GASB Statements Nos. 74 and 75 requirements;
- Additional actuarial valuation exhibits and financial disclosure required under GASB Nos 74 and 75; and
- Summary of assumptions and methods and plan provisions.

SECTION B

ACTUARIAL VALUATION RESULTS

Actuarial Valuation Results

The following section shows actuarial valuation results as of June 30, 2016, projected to June 30, 2017, using two alternative discount rates of 2.85 percent and 3.56 percent.

Plan benefits are funded based on a pay-as-you-go policy. The current funding policy includes revenues from five sources: current retirees, current active employees, local school districts, the State and the Medicare Part D subsidy from the Federal Government. Current retirees contribute a portion of the premium to participate in the program. All liability and expense numbers throughout the report are net of the retiree's share of premiums.

The unfunded actuarial accrued liability represents the portion of the total actuarial present value of all future employer-provided benefits which is attributable to prior years, minus any valuation assets. It represents a measure of the unfunded accrued liability allocable to past service. The cost and liabilities shown in the following pages are employer costs and liabilities, net of any co-pays, deductibles, retiree coinsurance or retiree contributions using the Entry Age Normal cost method.

**Teachers' Retirement Insurance Program
Retiree Healthcare Program
Exhibit 1**

Discount Rate	2.85%	3.56%
Ultimate Trend Pre-Medicare	5.09%	5.09%
Ultimate Trend Post-Medicare	4.50%	4.50%

Summary of Actuarial Valuation Results as of	June 30, 2016	June 30, 2016
A) Actuarial Accrued Liability (AAL) ¹		
i) Active employees - Full-Time and Part-Time	\$ 12,844,981,181	\$ 11,301,201,214
ii) Active employees - Hourly and Substitute	880,849,688	723,739,234
iii) Current retirees and their covered dependents	9,291,202,873	8,431,274,813
iv) Waived retirees and their covered dependents ²	1,248,222,150	1,111,293,137
v) Deferred vesteds ^{2,3}	2,631,639,354	2,126,631,373
vi) Deferred vesteds ^{2,4}	379,492,612	298,547,892
vii) Total	\$ 27,276,387,858	\$ 23,992,687,663
B) Market Value of Assets	\$ (59,415,000)	\$ (59,415,000)
C) Unfunded Actuarial Accrued Liability (UAAL)	\$ 27,335,802,858	\$ 24,052,102,663
D) Funded Ratio: [B / A]	-0.2%	-0.2%
E) UAAL as a percentage of covered payroll	289.4%	254.7%
F) Gross Normal Cost	\$ 1,684,864,123	\$ 1,329,353,122
Expected Active Employee Contributions ⁵	105,777,750	105,777,750
Net Annual Normal Cost	\$ 1,579,086,373	\$ 1,223,575,372
G) Expected First Year Benefit Payments	\$ 313,435,687	\$ 313,435,687
H) Projected Actuarial Accrued Liability at end of Year	\$ 29,468,776,895	\$ 25,904,539,385
I) Covered Payroll	\$ 9,444,442,000	\$ 9,444,442,000
G) Participant Information		
i) Number of Covered Participants		
a) Active employees - Full-Time and Part-Time	129,240	
b) Active employees - Hourly and Substitute	24,936	
c) Current retirees and survivors	64,030	
d) Waived retirees	21,853	
e) Dependents	10,597	
f) Deferred vesteds ^{2,3}	11,311	
g) Deferred vesteds ^{2,4}	6,485	
h) Total	268,452	

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¹ Actuarial accrued liability as of June 30, 2016, based on census, assumptions, and methods as of June 30, 2016.

² Valuation assumes a percentage of waived retirees and deferred vested members under the age of 70 as of June 30, 2016, and waived beneficiaries over the age of 26 and under the age of 70 as of June 30, 2016, will elect retiree healthcare coverage in the future.

³ Members with at least 7 years of service.

⁴ Members with 5 to 7 years of service. Liability amount represents approximately 50% of the total liability determined for this group. Approximately 50% is allocated to TRIP and 50% is allocated to SEGIP.

⁵ Active members contribute 1.12% of pay for fiscal year 2017. Based on expected payroll for FY 2017.

SECTION C

GASB STATEMENT NOS. 74 AND 75 INFORMATION

Auditor's Note: This information is intended to assist in preparation of the financial statements of the Teacher's Retirement Insurance Program of Illinois. Financial statements are the responsibility of management, subject to the auditor's review. Please let us know if the auditor recommends any changes.

GASB Statement Nos. 74 and 75 Information

Discussion

Accounting Standard

For post-employment (OPEB) benefit plans that are administered through trusts or equivalent arrangements, Governmental Accounting Standards Board (GASB) Statement No. 74, "Financial Reporting for Postemployment Benefit Plans other than Pension Plans," replaces the requirements of GASB Statement No. 43, "Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans." GASB Statement No. 74 establishes standards of financial reporting for separately issued financial reports of state and local government OPEB plans.

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

GASB Statement Nos. 74 and 75 are effective for fiscal years beginning after June 15, 2016, and June 15, 2017, respectively.

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

Plan Financial Statements

GASB Statement No. 74 requires defined benefit OPEB plans which are administered as trusts or equivalent arrangements to present two financial statements: a statement of fiduciary net position and a statement of changes in fiduciary net position. The statement of fiduciary net position presents the assets and liabilities of the OPEB plan at the end of the OPEB plan's reporting period. The statement of changes in fiduciary net position presents the additions, such as contributions and investment income, and deductions, such as benefit payments and expense, and net increase or decrease in the fiduciary net position.

GASB Statement No. 75 requires state and local government employers to recognize the net OPEB liability and the OPEB expense on their financial statements, along with the related deferred outflows and inflows of resources. 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.

The OPEB expense recognized each fiscal year is equal to the change in the net OPEB liability from the beginning of the year to the end of the year, adjusted for deferred recognition of the liability and investment experience.

The GASB Statement No. 74 information contained in this report is based on an actuarial valuation date of June 30, 2016, projected to a measurement date of June 30, 2017.

GASB Statement Nos. 74 and 75 Information

For GASB Statement No. 75 reporting purposes, the plan sponsor's fiscal year end June 30, 2018, financial reporting will be based on a measurement date of June 30, 2017.

The information contained in this report does not incorporate any employer contributions made subsequent to the measurement date of June 30, 2017.

GASB Statement No. 75 requires that 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.

Notes to Financial Statements

GASB Statement No. 75 requires the notes of the employer's financial statements to disclose the total OPEB expense, the OPEB plan's liabilities and assets, and deferred outflows of resources and inflows of resources related to OPEB.

GASB Statement Nos. 74 and 75 require the notes of the financial statements for the Plan and Plan Sponsor to include certain additional information. The list of disclosure items should include:

- The name of the OPEB plan, the administrator of the OPEB plan and the identification of whether the OPEB plan is a single-employer, agent or cost-sharing OPEB plan;
- A description of the benefits provided by the plan;
- A brief description of changes in benefit terms or assumptions that affected the measurement of the total OPEB liability since the prior measurement date;
- The number of plan members by category and if the plan is closed;
- A description of the plan's funding policy, which includes member and employer contribution requirements;
- The OPEB plan's investment policies;
- The OPEB plan's fiduciary net position and the net OPEB liability;
- The net OPEB liability using +/- 1% change on the discount rate;
- The net OPEB liability using +/- 1% change on the healthcare trend rate;
- Significant assumptions and methods used to calculate the total OPEB liability;
- Inputs to the discount rates; and
- Certain information about mortality assumptions and the dates of experience studies.

OPEB plans that are administered through trusts or equivalent arrangements are required to disclose additional information in accordance with GASB Statement No. 74. This information includes:

- The composition of the OPEB plan's Board and the authority under which benefit terms may be amended;
- A description of how fair value is determined;
- Information regarding certain reserves and investments, which include concentrations of investments greater than or equal to 5%, receivables and insurance contracts excluded from plan assets; and
- Annual money-weighted rate of return.

GASB Statement Nos. 74 and 75 Information

Required Supplementary Information

GASB Statement No. 74 requires a 10-year fiscal history of:

- Sources of changes in the net OPEB liability;
- Information about the components of the net OPEB liability and related ratios, including the OPEB plan's fiduciary net position as a percentage of the total OPEB liability, and the net OPEB liability as a percent of covered-employee payroll;
- Comparison of the actual employer contributions to the actuarially determined contributions, if applicable, based on the plan's funding policy; and
- For plans with an actuarially determined contribution, the schedule covering each of the 10 most recent fiscal years of the actuarially determined contribution, contributions to the OPEB plan and related ratios.

Frequency and Timing 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.

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).

Since TRIP is financed on a pay-as-you-go basis, the sponsor has selected a discount rate consistent with the 20-year general obligation bond index described above. The discount rates are 2.85 percent as of June 30, 2016, and 3.56 percent as of June 30, 2017.

Actuarial Assumptions

The actuarial assumptions used to value the liabilities are outlined in detail in Section E. The assumptions include details on the healthcare trend assumption and the aging factors, as well as the cost method used to develop the OPEB expense.

The pension-related assumptions were based on an experience study for the period July 1, 2011, to June 30, 2014, conducted by the pension system's actuary as approved by the pension system. The economic assumptions for the pension valuation as of June 30, 2016, were updated by the system. The OPEB-related assumptions were recommended by GRS and approved by CMS.

GASB Statement Nos. 74 and 75 Information

Future Uncertainty or Risk

Future results may differ from those anticipated in this actuarial valuation. Reasons include, but are not limited to:

- Claims experience differing from expected;
- Medical trend experience differing from expected;
- Changes in the healthcare plan designs offered to active and retired members;
- Changes in healthcare related costs due to recent experience; and
- Participant behavior differing from expected; e.g.,
 - Elections at retirement;
 - One-person versus two-person coverage elections; and
 - Timing of retirement or termination.

Benefits Valued

The benefit provisions that were valued are described in Section F. The actuarial valuation is required to be performed on the current benefit terms and existing legal agreements. Consideration is to be given to the written plan document as well as other communications between the employer and plan members and an established pattern of practice for cost sharing. The summary of major plan provisions is designed to outline principal plan benefits.

GASB Statement Nos. 74 and 75 Information

This section contains the following GASB Statement Nos. 74 and 75 information:

- GASB Statement Nos. 74 and 75 Summary;
- GASB Statement No. 74 Changes in Net OPEB Liability for plan year end June 30, 2017;
- GASB Statement No. 74 Multiyear Net OPEB Liability;
- GASB Statement No. 74 Schedule of Contributions;
- Notes to Schedule of Contributions;
- GASB Statement Nos. 74 and 75 Sensitivity of Net OPEB Liability plan year end June 30, 2017;
- GASB Statement No. 75 Changes in Net OPEB Liability for plan year end June 30, 2017, applicable to sponsor's fiscal year end June 30, 2018;
- GASB Statement No. 75 Expense measured as of plan year end June 30, 2017, and applicable to sponsor's fiscal year end June 30, 2018; and
- GASB Statement No. 75 Development of Inflows and Outflows as of June 30, 2017.

GASB Statement Nos. 74 and 75 Information

Summary of GASB Nos. 74 and 75 Results

	2017
Actuarial Valuation Date	June 30, 2016
Measurement Date of the Net OPEB Liability	June 30, 2017
Plan Year End for GASB Statement No. 74	June 30, 2017
Employer's Fiscal Year End for GASB Statement No. 75	June 30, 2018
Membership	
Number of	
- Retirees and Beneficiaries	64,030
- Inactive, Nonretired Members	39,649
- Active Members	154,176
- Total	257,855
Covered Payroll ^b	\$ 9,444,442,000
Net OPEB Liability	
Total OPEB Liability	\$ 25,904,539,385
Plan Fiduciary Net Position	(45,029,000)
Net OPEB Liability	\$ 25,949,568,385
Plan Fiduciary Net Position as a Percentage of Total OPEB Liability	-0.17%
Net OPEB Liability as a Percentage of Covered Payroll	274.76%
Development of the Single Discount Rate	
Single Discount Rate Beginning of Year	2.85%
Single Discount Rate End of Year	3.56%
Long-Term Expected Rate of Investment Return, Beginning of Year	0.00%
Long-Term Expected Rate of Investment Return, End of Year	0.00%
Long-Term Municipal Bond Rate Beginning of Year ^a	2.85%
Long-Term Municipal Bond Rate End of Year ^a	3.56%
Year Assets are Projected to be depleted	2016
Total OPEB Expense for Fiscal Year End June 30, 2017, Applicable to Sponsor's Fiscal Year End June 30, 2018	\$ 1,928,853,706

Deferred Outflows and Deferred Inflows of Resources by Source to be Recognized in Future OPEB Expenses as of June 30, 2018

	Deferred Outflows of Resources	Deferred (Inflows) of Resources
Difference Between Expected and Actual Experience	\$ -	\$ (14,697,939)
Changes in Assumptions	-	(3,089,638,640)
Net Difference Between projected and Actual Earnings on OPEB Plan Investments	-	(285,600)
Total	\$ -	\$ (3,104,622,180)

^a Source: Fixed-income municipal bonds with 20 years to maturity that include only federally tax-exempt municipal bonds as reported in Fidelity Index's "20-Year Municipal GO AA Index" as of June 30, 2017. In describing this index, Fidelity notes that the municipal curves are constructed using option-adjusted analytics of a diverse population of over 10,000 tax-exempt securities.

GASB Statement Nos. 74 and 75 Information

GASB No. 74 Schedule of Changes in Net OPEB Liability and Related Ratios Multiyear

Fiscal Year Ending June 30,	<u>2017</u>
Total OPEB Liability	
Service Cost	\$ 1,684,864,123
Interest on the Total OPEB Liability	820,960,601
Changes of Benefit Terms	-
Difference between Expected and Actual Experience	(16,955,687)
Changes of Assumptions	(3,564,237,510)
Benefit Payments ^a	<u>(296,480,000)</u>
Net Change in Total OPEB Liability	(1,371,848,473)
Total OPEB Liability - Beginning	27,276,387,858
Total OPEB Liability - Ending (a)	<u>\$ 25,904,539,385</u>
Plan Fiduciary Net Position	
Employer Contributions	\$ 210,466,000
Active Member Contributions	\$ 111,734,000
Net Investment Income	357,000
Benefit Payments ^a	(296,480,000)
Operating Expenses	(13,790,000)
Other	<u>2,099,000</u>
Net Change in Plan Fiduciary Net Position	14,386,000
Plan Fiduciary Net Position - Beginning	(59,415,000)
Plan Fiduciary Net Position - Ending (b)	<u>(45,029,000)</u>
Net OPEB Liability - Ending (a) - (b)	<u>\$ 25,949,568,385</u>
Plan Fiduciary Net Position as a Percentage of Total OPEB Liability	-0.17%
Covered-Employee Payroll	\$ 9,444,442,000
Net OPEB Liability as a Percentage of Covered-Employee Payroll	274.76%

^a Actual benefits paid by sponsor.

GASB Statement Nos. 74 and 75 Information

GASB No. 74 Schedule of Net OPEB Liability Multiyear

FY Ending June 30,	Total OPEB Liability	Fiduciary Net Position	Net OPEB Liability	Fiduciary Net Position as a % of Total OPEB Liability	Covered Payroll ^a	Net OPEB Liability as a % of Covered Payroll
2016	\$ 27,276,387,858	\$ (59,415,000)	\$ 27,335,802,858	-0.22%	9,147,159,000	298.84%
2017	25,904,539,385	(45,029,000)	25,949,568,385	-0.17%	9,444,442,000	274.76%

Estimated payroll for fiscal year end June 30, 2016, based on fiscal year end June 30, 2017, payroll adjusted by wage inflation assumption of 3.25 percent.

GASB Statement Nos. 74 and 75 Information

GASB No. 74 Schedule of Contributions Multiyear

<u>FY Ending June 30,</u>	<u>Actuarially Determined Contribution</u>	<u>Actual Employer Contribution</u>	<u>Contribution Deficiency (Excess)</u>	<u>Covered Payroll</u>	<u>Actual Contribution as a % of Covered Payroll</u>
2016	N/A	\$ 194,405,000	N/A	9,147,159,000	2.13%
2017	N/A	\$ 210,466,000	N/A	9,444,442,000	2.23%

Contributions for TRIP are defined by State statute and Actuarially Determined Contributions are not developed. Benefits are financed on a pay-as-you basis, based on contribution rates defined by statute. For fiscal year end June 30, 2017, contribution rates are 1.12% of pay for active members, 0.84% of pay for school districts, and 1.12% of pay for the State. Retired members contribute a percentage of premium rates. The goal of the policy is to finance current year costs plus a margin for incurred but not paid plan costs.

GASB Statement Nos. 74 and 75 Information

Notes to Schedule of Contributions

Valuation Date	June 30, 2016
Measurement Date	June 30, 2017
Sponsor's Fiscal year End	June 30, 2018

Methods and Assumptions Used to Determine Actuarial Liability and Contributions:

Actuarial Cost Method	Entry Age Normal, used to measure the Total OPEB Liability
Contribution Policy	Benefits are financed on a pay-as-you basis. Contribution rates are defined by statute. For fiscal year end June 30, 2017, contribution rates are 1.12% of pay for active members, 0.84% of pay for school districts, and 1.12% of pay for the State. Retired members contribute a percentage of premium rates. The goal of the policy is to finance current year costs plus a margin for incurred but not paid plan costs.
Asset Valuation Method	Market value
Investment Rate of Return	0%, net of OPEB plan investment expense, including inflation, for all plan years.
Inflation	2.75%
Salary Increases	Depends on service and ranges from 9.25% at 1 year of service to 3.25% at 20 or more years of service. Salary increase includes a 3.25% wage inflation assumption.
Retirement Age	Experience-based table of rates that are specific to the type of eligibility condition. Last updated for the June 30, 2016, actuarial valuation.
Mortality	Retirement and Beneficiary Annuitants: RP-2014 White Collar Annuitant Mortality Table, adjusted for TRS experience. Disabled Annuitants: RP-2014 Disabled Annuitant Table. Pre-Retirement: RP-2014 White Collar Table. All tables reflect future mortality improvements using Projection Scale MP-2014.
Healthcare Cost Trend Rates	Actual trend used for fiscal year 2017. For fiscal years on and after 2018, trend starts at 8.00% and 9.00% for non-Medicare cost and post-Medicare costs, respectively, and gradually decreases to an ultimate trend of 4.50%. Additional trend rate of 0.59% is added to non-Medicare cost on and after 2020 to account for the Excise Tax.
Aging Factors	Based on the 2013 SOA Study "Health Care Costs - From Birth to Death"
Expenses	Health administrative expenses are included in the development of the per capita claims costs. Operating expenses are included as a component of the Annual OPEB Expense.

GASB Statement Nos. 74 and 75 Information

Single Discount Rate

The State, school districts and active members contribute 1.12%, 0.84%, 1.12% of pay, respectively for fiscal year 2017. Retirees contribute a percentage of the premium rate. The State also contributes an additional amount to cover plan costs in excess of contributions and investment income. Because plan benefits are financed on a pay-as-you-go basis, the single discount rate is based on a tax-exempt municipal bond rate index of 20-year general obligation bonds with an average AA credit rating as of the measurement date. A single discount rate of 2.85% at June 30, 2016, and 3.56% at June 30, 2017, was used to measure the total OPEB liability. The increase in the single discount rate, from 2.85% to 3.56%, caused the total OPEB liability to decrease by approximately \$3.564 billion.

Investment Return

During plan year end June 30, 2017, the trust earned \$357,000 in interest, and due to a significant benefit payable, the market value of assets at June 30, 2017, is a negative \$43 million. Given the significant benefit payable, negative asset value and pay-as-you-go funding policy, the investment return assumption was set to zero.

Money-Weighted Rate of Return

The annual money-weighted rate of return was estimated based on monthly investment performance, net of investment expenses, adjusted for changing amounts actually invested. The annual money-weighted rate of return was 0.678% for plan year end June 30, 2017, and 0.382% for plan year end June 30, 2016

Sensitivity of Net OPEB Liability

The following table shows the plan's net OPEB liability as of June 30, 2017, using the current single discount rate of 3.56%, and sensitivity single discount rates that are either one percentage point higher or lower:

Current Single Discount		
1% Decrease	Rate Assumption	1% Increase
2.56%	3.56%	4.56%
\$ 31,139,345,900	\$ 25,949,568,385	\$ 21,796,923,765

GASB Statement Nos. 74 and 75 Information

The following table shows the plan's net OPEB liability as of June 30, 2017, using current trend rates and sensitivity trend rates that are either one percentage point higher or lower. The key trend rates are 8.00% in 2018 decreasing to an ultimate trend rate of 5.09% in 2025, for non-Medicare coverage, and 9.00% in 2018 decreasing to an ultimate trend rate of 4.50% in 2027 for Medicare coverage.

Healthcare Cost		
1% Decrease ^a	Trend Rates Assumption	1% Increase ^b
\$ 20,943,959,662	\$ 25,949,568,385	\$ 33,134,273,268

^a One percentage point decrease in healthcare trend rates are 7.00% in 2018 decreasing to an ultimate trend rate of 4.09% in 2025, for non-Medicare coverage, and 8.00% in 2018 decreasing to an ultimate trend rate of 3.50% in 2027 for Medicare coverage.

^b One percentage point increase in healthcare trend rates are 9.00% in 2018 decreasing to an ultimate trend rate of 6.09% in 2025, for non-Medicare coverage, and 10.00% in 2018 decreasing to an ultimate trend rate of 5.50% in 2027 for Medicare coverage.

GASB Statement Nos. 74 and 75 Information

Schedule of Changes in Net OPEB Liability under GASB Statement No. 75 Measured as of June 30, 2017, Applicable to Plan Sponsor's Fiscal Year End June 30, 2018

Fiscal Year Ending June 30,	2017
Total OPEB Liability	
Service Cost	\$ 1,684,864,123
Interest on the Total OPEB Liability	820,960,601
Changes of Benefit Terms	-
Difference between Expected and Actual Experience	(16,955,687)
Changes of Assumptions	(3,564,237,510)
Benefit Payments ^a	(296,480,000)
Net Change in Total OPEB Liability	(1,371,848,473)
Total OPEB Liability - Beginning	27,276,387,858
Total OPEB Liability - Ending (a)	\$ 25,904,539,385
Plan Fiduciary Net Position	
Employer Contributions	\$ 210,466,000
Active Member Contributions	\$ 111,734,000
Net Investment Income	357,000
Benefit Payments ^a	(296,480,000)
Operating Expenses	(13,790,000)
Other	2,099,000
Net Change in Plan Fiduciary Net Position	14,386,000
Plan Fiduciary Net Position - Beginning	(59,415,000)
Plan Fiduciary Net Position - Ending (b)	(45,029,000)
Net OPEB Liability - Ending (a) - (b)	\$ 25,949,568,385
Plan Fiduciary Net Position as a Percentage of Total OPEB Liability	-0.17%
Covered-Employee Payroll	\$ 9,444,442,000
Net OPEB Liability as a Percentage of Covered-Employee Payroll	274.76%

GASB Statement Nos. 74 and 75 Information

Statement of OPEB Expense under GASB Statement No. 75 Measured as of June 30, 2017 Applicable to Plan Sponsor's Fiscal Year End June 30, 2018

A. Expense

1. Service Cost	\$	1,684,864,123
2. Interest on the Total OPEB Liability		820,960,601
3. Current-Period Benefit Changes		-
4. Active Member Contributions		(111,734,000)
5. Projected Earnings on Plan Investments		-
6. OPEB Plan Operating Expenses		13,790,000
7. Other Changes in Plan Fiduciary Net Position		(2,099,000)
8. Recognition of Outflow/(Inflow) due to Liability Experience		(2,257,748)
9. Recognition of Outflow/(Inflow) due to Assumption Changes		(474,598,870)
10. Recognition of Outflow/(Inflow) due to Investment Experience		(71,400)
11. Total OPEB Expense	\$	1,928,853,706

B. Reconciliation of Net OPEB Liability

1. Net OPEB Liability Beginning of Year	\$	27,335,802,858
2. OPEB Expense		1,928,853,706
3. Employer Contributions		(210,466,000)
4. Change in Liability Experience Outflows/(Inflows) Recognized in Current Liabilities		(14,697,939)
5. Change in Assumption Changes Experience Outflows/(Inflows) Recognized in Current Liabilities		(3,089,638,640)
6. Change in Investment Experience Outflows/(Inflows) Recognized in Current Assets		(285,600)
7. Net OPEB Liability End of Year	\$	25,949,568,385

GASB Statement Nos. 74 and 75 Information

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 expected remaining service lives of all active employees in the plan was approximately 1,936,078 years. Additionally, the total plan membership (active employees and inactive employees) was 257,696. As a result, the average of the expected remaining service lives for purposes of recognizing the applicable deferred outflows and inflows of resources established in the current measurement period is 7.51 years.

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.

GASB Statement Nos. 74 and 75 Information

Statement of Outflows and Inflows Arising from Current and Prior Reporting Periods Measured as of June 30, 2017, Applicable to Plan Sponsor's Fiscal Year End June 30, 2018

A. Outflows and (Inflows) of Resources Recognized in Current and Future OPEB Expenses as of Plan Year End June 30, 2017

Experience (Gain)/Loss	Original Balance	Date Established	Original Recognition Period/ Amortization Factor	Amount Recognized in Past OPEB Expenses	Amount Recognized in Current OPEB Expense	Deferred (Inflows) to be Recognized in Future OPEB Expenses	Deferred Outflows to be Recognized in Future OPEB Expenses
1. Liability (Gain)/Loss	\$ (16,955,687)	June 30, 2017	7.5100	\$ -	\$ (2,257,748)	\$ (14,697,939)	\$ -
	\$ (16,955,687)		7.5100	\$ -	\$ (2,257,748)	\$ (14,697,939)	\$ -
2. Assumption Changes	\$ (3,564,237,510)	June 30, 2017	7.5100	\$ -	\$ (474,598,870)	\$ (3,089,638,640)	\$ -
	\$ (3,564,237,510)		7.5100	\$ -	\$ (474,598,870)	\$ (3,089,638,640)	\$ -
3. Investment (Gain)/Loss	\$ (357,000)	June 30, 2017	5.0000	\$ -	\$ (71,400)	\$ (285,600)	\$ -
	\$ (357,000)		5.0000	\$ -	\$ (71,400)	\$ (285,600)	\$ -
4. Total				\$ -	\$ (476,928,017)	\$ (3,104,622,180)	\$ -

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

Year Ending June 30,	Liability Outflows (Inflows)	Assumption Changes Outflows/(Inflows)	Investment Outflows/(Inflows)	Year Ending June 30,	Deferred Outflows	Deferred (Inflows)	Net Outflows/(Inflows)
2017	\$ (2,257,748)	\$ (474,598,870)	\$ (71,400)	2017	\$ -	\$ (476,928,017)	\$ (476,928,017)
2018	\$ (2,257,748)	\$ (474,598,870)	\$ (71,400)	2018	\$ -	\$ (476,928,017)	\$ (476,928,017)
2019	\$ (2,257,748)	\$ (474,598,870)	\$ (71,400)	2019	\$ -	\$ (476,928,017)	\$ (476,928,017)
2020	\$ (2,257,748)	\$ (474,598,870)	\$ (71,400)	2020	\$ -	\$ (476,928,017)	\$ (476,928,017)
2021	\$ (2,257,748)	\$ (474,598,870)		2021	\$ -	\$ (476,856,617)	\$ (476,856,617)
2022	\$ (2,257,748)	\$ (474,598,870)		2022	\$ -	\$ (476,856,617)	\$ (476,856,617)
2023	\$ (1,151,451)	\$ (242,045,423)			\$ -	\$ (243,196,875)	\$ (243,196,875)
Total	\$ (14,697,939)	\$ (3,089,638,640)	\$ (285,600)		\$ -	\$ (3,104,622,180)	\$ (3,104,622,180)

Numbers may not add due to rounding.

SECTION D

ADDITIONAL VALUATION EXHIBITS

Additional Valuation Exhibits

Exhibit 1

40-Year Projection of Expected Employer Claims ^a

Year Beginning July 1	Expected Employer Claims	Year Beginning July 1	Expected Employer Claims
2016 ^b	\$ 310,270,000	2036	\$ 1,832,368,600
2017	349,397,100	2037	1,931,634,400
2018	408,199,000	2038	2,036,089,700
2019	476,622,200	2039	2,140,850,100
2020	553,318,300	2040	2,244,088,700
2021	635,780,400	2041	2,341,564,200
2022	719,269,600	2042	2,428,244,000
2023	801,890,500	2043	2,509,115,100
2024	881,465,400	2044	2,573,328,100
2025	953,343,000	2045	2,621,126,300
2026	1,016,262,200	2046	2,654,955,800
2027	1,080,855,000	2047	2,670,935,900
2028	1,150,645,600	2048	2,680,533,000
2029	1,225,877,800	2049	2,685,420,000
2030	1,305,870,600	2050	2,689,551,100
2031	1,389,236,500	2051	2,698,817,200
2032	1,477,536,600	2052	2,713,900,100
2033	1,566,549,000	2053	2,737,205,800
2034	1,653,817,200	2054	2,764,084,700
2035	1,740,270,200	2055	2,780,446,400

^a Expected claims net of retiree contributions for current participants.

^b Based on actual paid claims for fiscal year beginning July 1, 2016, and estimated incurred claims on and after fiscal years beginning July 1, 2017.

Additional Valuation Exhibits

Exhibit 2

Summary of Demographic Information as of June 30, 2016

A) Active Participants - Full-Time and Part-Time Primary Member	Dependent	Total	
i) Counts	129,240	129,240	
ii) Average Age	41.6	41.6	
iii) Average Service	12.7	12.7	
B) Active Participants - Hourly and Substitute			
i) Counts	24,936	24,936	
ii) Average Age	44.3	44.3	
iii) Average Service	2.4	2.4	
C) Retirees and Dependents Under Age 65 ^b			
i) Counts	14,165	1,718	15,883
ii) Average Age	62.1	60.9	62.0
D) Retirees and Dependents Over Age 65 ^b			
i) Counts	49,855	8,179	58,034
ii) Average Age	74.7	74.5	74.6
E) Waived Retirees and Dependents ^c			
i) Counts	21,853		21,853
ii) Average Age	64.6		64.6
F) Children			
i) Counts	10	700	710
ii) Average Age	17.9	21.5	21.4
G) Deferred vesteds ^d			
i) Counts	11,311		11,311
ii) Average Age	47.5		47.5
H) Deferred vesteds ^e			
i) Counts	6,485		6,485
ii) Average Age	45.0		45.0
I) Total Participants	257,855	10,597	268,452

^a Excludes members who are active in TRS and categorized as a dependent in SEGIP, and 1,448 active members in TRS with vested benefits in SERS, SURS, GARS, or JRS.

^b Only includes members and dependents currently receiving benefits through TRIP.

^c Includes members currently under the age of 70 and waived beneficiaries over the age of 26 and under 70.

^d Members with at least 7 years of service and currently under the age of 70.

^e Members with 5 to 7 years of service and currently under the age of 70.

Additional Valuation Exhibits

Exhibit 3

Assets Available for Benefits

	As of June 30,	
	2016	2017
Net Assets Held in Trust for Post-Employment Benefits, Beginning of Year	\$ (66,272,000)	\$ (59,415,000)
Revenues		
State Contributions	\$ 108,259,000	\$ 109,703,000
Employer Contributions	86,146,000	100,763,000
Federal Government Medicare Part D Subsidy	1,838,000	2,053,000
Active Member Contributions	115,355,000	111,734,000
Retired Member Contributions	124,788,000	126,844,879
COBRA	87,000	46,000
Interest	174,000	357,000
Total Revenues	\$ 436,647,000	\$ 451,500,879
Deductions		
Benefits	\$ 420,458,000	\$ 423,324,879
Administrative Expense	9,332,000	13,790,000
Total Deductions	\$ 429,790,000	\$ 437,114,879
Net Change	\$ 6,857,000	\$ 14,386,000
Net Assets Held in Trust for Post-Employment Benefits, End of Year	\$ (59,415,000)	\$ (45,029,000)

SECTION E

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

Summary of Actuarial Assumptions and Methods

Development of Per Capita Claim Costs

The per capita claims used in the valuation were calculated by the State's healthcare actuary and are based on average per member costs by plan type for the period July 1, 2016, through June 30, 2017, as provided by the Department of Central Management Services (CMS). The per capita claims for the MAPD plans used in the valuation were based on weighted average premium rate, as provided by CMS. The average costs were adjusted at each respective retirement age by the morbidity factors disclosed in the assumption section of the report.

Cost Method and Expense Calculations for Retiree Healthcare Benefits

The retiree healthcare actuarial valuation was based on the Entry Age Normal cost method. Under this method, the normal cost and actuarial accrued liability are directly proportional to the employee's salary. The normal cost rate equals the present value of future benefits at entry age divided by the present value of future salary at entry age. The normal cost at the member's attained age equals the normal cost rate at entry age multiplied by the salary at attained age. The actuarial accrued liability equals the present value of benefits at attained age less present value of future salaries at attained age multiplied by normal cost rate at entry age.

Under GASB Statement Nos. 74 and 75, the Entry Age Normal Method is the required cost method.

Census Data

The valuation was based on TRS active, inactive and retiree data as of June 30, 2016, and TRIP retiree data as of June 30, 2016.

Summary of Actuarial Assumptions and Methods

Actuarial Assumptions

The actuarial assumptions used in our valuation are outlined on the following pages.

Valuation Date	June 30, 2016
Measurement Date	June 30, 2017
Discount Rate	3.56%
Inflation¹	2.75%
Wage Inflation²	3.25%
OPEB Assumptions	

<u>Fiscal Year</u>	<u>Healthcare Trend</u>		<u>Retiree Premium</u>
	<u>Pre-Medicare Medical and Rx³</u>	<u>Post-Medicare Medical and Rx⁴</u>	
2018	8.00%	9.00%	5.00%
2019	7.50%	8.50%	5.00%
2020	7.59%	8.00%	5.00%
2021	7.09%	7.50%	5.00%
2022	6.59%	7.00%	5.00%
2023	6.09%	6.50%	5.00%
2024	5.59%	6.00%	5.00%
2025	5.09%	5.50%	5.00%
2026	5.09%	5.00%	5.00%
2027	5.09%	4.50%	4.50%

¹ Inflation assumption used to estimate the impact of the Excise Tax under Healthcare Reform.

² Wage inflation used to project payroll.

³ Higher trend rate on and after 2020 to account for the Excise Tax under Federal Healthcare Reform.

⁴ In addition to these trend rates, the per capita claims costs for the Medicare Advantage Prescription Drug plans (MAPD) are increased to reflect an ultimate MAPD savings of 15 percent in 2026 and thereafter.

Summary of Actuarial Assumptions and Methods

<u>Age</u>	<u>Morbidity Factor</u>	
	<u>Male</u>	<u>Female</u>
50	5.81%	3.46%
55	5.44%	2.84%
60	5.02%	3.66%
65	1.68%	2.46%
70	1.72%	1.89%
75	1.07%	1.20%
80	0.62%	0.97%
85	-0.37%	0.36%
90	-0.28%	-0.14%
95	-0.38%	-2.21%

Annual Per Capita Claims Costs for Pre 65, Not Medicare Eligible Members

TCHP			OAP			HMO		
Age	Medical and Rx		Age	Medical and Rx		Age	Medical and Rx	
	Male	Female		Male	Female		Male	Female
20	\$ 3,043	\$ 3,982	20	\$ 2,988	\$ 3,909	20	\$ 2,796	\$ 3,659
25	2,576	5,267	25	2,529	5,171	25	2,368	4,840
30	3,155	7,424	30	3,097	7,288	30	2,899	6,822
35	3,931	8,076	35	3,859	7,928	35	3,612	7,421
40	4,908	7,976	40	4,819	7,830	40	4,510	7,329
45	6,111	8,433	45	5,999	8,279	45	5,615	7,750
50	7,957	9,802	50	7,811	9,622	50	7,311	9,007
51	8,419	10,141	51	8,265	9,955	51	7,736	9,319
52	8,900	10,474	52	8,737	10,282	52	8,179	9,624
53	9,401	10,797	53	9,229	10,600	53	8,639	9,922
54	9,924	11,115	54	9,742	10,911	54	9,119	10,214
55	10,470	11,432	55	10,278	11,222	55	9,621	10,505
56	11,039	11,756	56	10,837	11,541	56	10,144	10,803
57	11,631	12,099	57	11,418	11,877	57	10,688	11,118
58	12,242	12,468	58	12,018	12,240	58	11,249	11,457
59	12,871	12,871	59	12,636	12,636	59	11,828	11,828
60	13,523	13,315	60	13,275	13,071	60	12,426	12,235
61	14,202	13,802	61	13,942	13,550	61	13,050	12,683
62	14,913	14,333	62	14,640	14,071	62	13,704	13,171
63	15,660	14,906	63	15,374	14,633	63	14,391	13,698
64	16,444	15,518	64	16,143	15,234	64	15,111	14,260

Summary of Actuarial Assumptions and Methods

Annual Per Capita Claims Costs for Medicare Eligible Members

Age	TCHP		OAP		HMO		MAPD	
	Medical and Rx		Medical and Rx		Medical and Rx		Medical and Rx	
	Male	Female	Male	Female	Male	Female	Male	Female
65	\$5,526	\$5,212	\$5,376	\$5,070	\$5,682	\$5,360	\$2,332	\$2,200
66	5,619	5,341	5,466	5,195	5,778	5,491	2,371	2,254
67	5,715	5,466	5,559	5,318	5,876	5,621	2,412	2,307
68	5,813	5,590	5,655	5,438	5,978	5,748	2,454	2,359
69	5,915	5,710	5,754	5,554	6,082	5,871	2,497	2,410
70	6,020	5,825	5,856	5,667	6,190	5,990	2,541	2,459
71	6,124	5,935	5,957	5,774	6,297	6,103	2,585	2,505
72	6,222	6,040	6,053	5,875	6,398	6,210	2,626	2,549
73	6,311	6,137	6,140	5,970	6,490	6,310	2,664	2,590
74	6,392	6,227	6,218	6,057	6,573	6,403	2,698	2,628
75	6,466	6,309	6,290	6,137	6,648	6,487	2,729	2,663
76	6,535	6,385	6,357	6,211	6,720	6,565	2,758	2,695
77	6,603	6,457	6,423	6,282	6,789	6,640	2,787	2,725
78	6,669	6,529	6,488	6,351	6,858	6,713	2,815	2,755
79	6,733	6,600	6,549	6,420	6,923	6,786	2,841	2,785
80	6,788	6,669	6,603	6,487	6,979	6,857	2,865	2,815
81	6,830	6,734	6,644	6,550	7,023	6,924	2,883	2,842
82	6,856	6,791	6,669	6,606	7,049	6,983	2,893	2,866
83	6,863	6,842	6,677	6,655	7,057	7,035	2,897	2,887
84	6,856	6,884	6,669	6,697	7,049	7,079	2,893	2,905
85	6,837	6,918	6,651	6,729	7,030	7,113	2,886	2,920
86	6,812	6,942	6,626	6,753	7,004	7,139	2,875	2,930
87+	6,784	6,961	6,599	6,771	6,976	7,157	2,863	2,938

Summary of Actuarial Assumptions and Methods

Annual Per Capita Claims Costs for Post 65, Not Medicare Eligible Members

TCHP			OAP			HMO		
Medical and Rx			Medical and Rx			Medical and Rx		
Age	Male	Female	Age	Male	Female	Age	Male	Female
65	\$ 18,647	\$ 17,588	65	\$ 18,756	\$ 17,691	65	\$ 16,538	\$ 15,599
66	18,961	18,021	66	19,071	18,126	66	16,816	15,982
67	19,284	18,445	67	19,396	18,553	67	17,103	16,359
68	19,616	18,862	68	19,731	18,971	68	17,398	16,728
69	19,960	19,267	69	20,077	19,379	69	17,703	17,088
70	20,314	19,657	70	20,432	19,771	70	18,016	17,433
71	20,664	20,028	71	20,784	20,145	71	18,326	17,763
72	20,995	20,379	72	21,117	20,498	72	18,620	18,074
73	21,297	20,708	73	21,421	20,829	73	18,888	18,366
74	21,569	21,011	74	21,695	21,134	74	19,129	18,635
75	21,817	21,289	75	21,944	21,413	75	19,350	18,881
76	22,051	21,545	76	22,179	21,671	76	19,557	19,108
77	22,279	21,789	77	22,409	21,916	77	19,759	19,325
78	22,504	22,029	78	22,635	22,158	78	19,959	19,537
79	22,718	22,269	79	22,850	22,399	79	20,148	19,750
80	22,904	22,504	80	23,037	22,634	80	20,313	19,958
81	23,047	22,722	81	23,181	22,854	81	20,440	20,152
82	23,133	22,916	82	23,268	23,049	82	20,516	20,324
83	23,159	23,086	83	23,294	23,220	83	20,540	20,475
84	23,134	23,229	84	23,268	23,364	84	20,517	20,602
85	23,071	23,342	85	23,205	23,478	85	20,461	20,702
86	22,986	23,426	86	23,119	23,563	86	20,385	20,776
87+	22,892	23,488	87+	23,025	23,624	87+	20,302	20,831

Summary of Actuarial Assumptions and Methods

Participation

Eighty percent of future retirees that are currently active are assumed to elect healthcare coverage, with 80 percent electing single coverage and 20 percent electing two-person coverage.

Seventy percent of current deferred vested participants with at least seven years of service and younger than age 70 as of June 30, 2016, are assumed to elect healthcare coverage, with 80 percent electing single coverage and 20 percent electing two-person coverage.

Thirty-five percent of current deferred vested participants with five to seven years of service and younger than age 70 as of June 30, 2014, are assumed to be eligible under SEGIP or TRIP before retirement and elect healthcare coverage, with 80 percent electing single coverage and 20 percent electing two-person coverage. The liability for this group is allocated equally to TRIP and SEGIP.

For current retirees that have waived coverage, we have assumed:

- a) For those under age 62, 30 percent elect coverage at 62;
- b) For those age 62 to 70, 30 percent elect coverage as of the valuation date; and
- c) For those over age 70, 0 percent elect coverage.

Age for waived retirees was measured as of June 30, 2016.

The percentage of future members electing coverage under the TCHP, OAP and other HMO plans was based on the actual election percentages of the current TRIP population. Currently for pre-Medicare participants, about 38 percent participate in the TCHP, 33 percent participate in the OAP and 29 percent participate in HMO plans.

Retired members are assumed to participate in an MAPD plan six months after attaining age 65.

One hundred percent of spouses are expected to continue coverage after the death of the retiree.

Females are assumed to be three years younger than their spouses in cases where no spouse date of birth is supplied.

Pension-related assumptions

The pension-related assumptions disclosed in the Teachers' Retirement System (TRS) actuarial valuation report as of June 30, 2016.

Rates are applied consistently with the pension valuations, using the census data as of June 30, 2016, as provided by TRS and CMS. Retirement rates are applied at first eligibility for pension benefits, although retiree healthcare benefits may not be payable.

Deferred vested members are assumed to commence benefits at age 62.

Summary of Actuarial Assumptions and Methods

Salary Increase

Service	Annual Increase
1	9.25%
2	7.25%
3	6.75%
4	6.45%
5	6.25%
6	6.05%
7	5.85%
8	5.65%
9	5.45%
10	5.25%
11	5.05%
12	4.85%
13	4.65%
14	4.45%
15	4.25%
16	4.05%
17	3.85%
18	3.65%
19	3.45%
20 & above	3.25%

Summary of Actuarial Assumptions and Methods

Demographic Assumptions

Mortality

Healthy Life Mortality, Post-Retirement

RP-2014 White Collar Annuitant Tables, sex distinct with female rates multiplied by 76% for ages 50 to 77 and 106% for ages 78 to 114, and males rates multiplied by 115% for ages 78 to 114

Healthy Life Mortality, Post-Retirement Beneficiary

RP-2014 White Collar Annuitant Tables, sex distinct with female and male rates multiplied by 112% for ages 50 to 114

Healthy Life Mortality, Pre-Retirement

RP-2014 White Collar Mortality Table, sex distinct

Disabled Life Mortality, Post-Retirement

RP-2014 Disabled Table

Future annual improvements in mortality are based on the Society of Actuaries Mortality Projection Scale MP-2014.

Summary of Actuarial Assumptions and Methods

Spouse and Marriage Assumptions:

80.0 percent of active male participants and 70.0 percent of active female participants are assumed to be married. If no data is available, the female spouse is assumed to be three years younger than the male spouse.

Sample Turnover Rates						
% Separating Within Next Year						
Age	Non-Vested		Vested ¹		Vested ²	
	Male	Female	Male	Female	Male	Female
25	9.5%	8.4%	6.0%	6.5%	6.0%	6.5%
30	8.8%	11.3%	2.8%	5.0%	2.8%	5.0%
35	10.2%	11.6%	2.1%	3.5%	2.1%	3.5%
40	12.3%	10.8%	1.7%	2.2%	1.7%	2.2%
45	12.6%	10.3%	1.5%	1.9%	1.5%	1.9%
50	16.7%	11.8%	1.9%	1.7%	1.9%	1.7%
55	20.7%	17.0%	5.0%	3.8%	5.0%	3.8%
60	16.4%	16.9%	4.6%	4.0%	4.6%	4.0%
65	30.2%	35.0%	4.6%	4.0%	4.6%	4.0%

¹ Five or more years of service for members hired before January 1, 2011, and 10 or more years if service is hired on or after January 1, 2011.

Sample Disability Rates				
% Separating Within Next Year				
Age	Hired Before January 1, 2011		Hired On/After January 1, 2011	
	Male	Female	Male	Female
20	0.029%	0.030%	0.029%	0.030%
25	0.029%	0.030%	0.029%	0.030%
30	0.023%	0.061%	0.023%	0.061%
35	0.030%	0.069%	0.030%	0.069%
40	0.051%	0.112%	0.051%	0.112%
45	0.068%	0.140%	0.068%	0.140%
50	0.117%	0.192%	0.117%	0.192%
55	0.138%	0.240%	0.138%	0.240%
60	0.179%	0.227%	0.179%	0.227%
65	0.536%	0.410%	0.536%	0.410%

Summary of Actuarial Assumptions and Methods

The following assumptions apply to members hired before January 1, 2011:

Sample Normal Retirement Rates					
% Separating Within Next Year (Age-Based)					
Age	Service				
	<u>5 - 18</u>	<u>19 - 30</u>	<u>31</u>	<u>32 - 33</u>	<u>34 +</u>
54	0%	6%	8%	38%	60%
55	0%	10%	8%	38%	60%
56	0%	7%	8%	38%	45%
57	0%	7%	12%	40%	45%
58	0%	7%	12%	40%	40%
59	0%	25%	38%	60%	40%
60	14%	30%	48%	60%	40%
61	14%	27%	33%	45%	40%
62	14%	27%	50%	45%	40%
63	14%	27%	38%	50%	40%
64	24%	37%	50%	60%	40%
65	26%	37%	50%	50%	40%
66	26%	37%	50%	50%	40%
67	26%	37%	50%	50%	40%
68	26%	33%	50%	50%	40%
69	26%	33%	50%	50%	40%
70 & older	100%	100%	100%	100%	100%

Summary of Actuarial Assumptions and Methods

The following assumptions apply to members hired on or after January 1, 2011:

Sample Normal Retirement Rates					
% Separating Within Next Year (Age-Based)					
Age	Service				
	5 - 18	19 - 30	31	32 - 33	34 +
61 and younger	0%	0%	0%	0%	0%
62	13%	15%	20%	25%	25%
63-65	8%	10%	15%	20%	20%
66	20%	40%	40%	40%	40%
67	20%	40%	40%	40%	40%
68	100%	100%	100%	100%	100%

SECTION F

SUMMARY OF PRINCIPAL PLAN PROVISIONS

Summary of Principal Plan Provisions

PLAN MEMBERS

All members receiving monthly benefits from the Teachers' Retirement System (TRS) who have at least eight years of creditable service with TRS, the survivor of an annuitant or benefit recipient who had at least eight years of creditable service or a recipient of a monthly disability benefit are eligible to enroll in TRIP. Certain members covered under TRS for pension purposes are eligible for retiree healthcare benefits under the State Employees Group Insurance Program (SEGIP). Members eligible for coverage under SEGIP include: certified teachers working for certain State agencies, executives working for the Board of Education, regional superintendents, regional assistant superintendents, TRS fund staff and certain members with reciprocal service. Any member that was a participant in the plan that preceded TRIP is eligible to participate in TRIP.

ELIGIBLE SERVICE

Eligible Service includes creditable service used for purposes of determining pension benefits payable from TRS

NORMAL RETIREMENT

Retirees are eligible to participate in TRIP if they retire under the conditions of TRS and have a minimum of eight years of TRS service. The eligibility conditions for normal retirement under TRS are shown below.

Eligibility conditions

Age 60 with 10 years of service, age 62 with 5 years of service or age 55 with 35 years of service for members hired before January 1, 2011.

Age 67 with 10 years of service for members hired on or after January 1, 2011.

EARLY RETIREMENT

Early retirees are eligible to participate in TRIP if they retire under the conditions of TRS and have a minimum of eight years of TRS service. The eligibility conditions for early retirement under TRS are shown below.

Eligibility conditions

Age 55 with 20 years of service for members hired before January 1, 2011.

Age 62 with 10 years of service for members hired on or after January 1, 2011.

DISABILITY RETIREMENT

Disabled members are eligible to participate in TRIP if they are receiving disability benefits under the conditions of TRS.

Eligibility conditions

There is no specific age or service requirement for receipt of disability benefits except for temporary disability benefits which require a minimum of 3 years of TRS service.

VESTED TERMINATIONS

Members who terminate with more than eight years of service are eligible to enroll in TRIP once they begin receiving retirement benefits. Members hired on or after January 1, 2011, are vested after 10 years of service.

Summary of Principal Plan Provisions

DEPENDENTS ELIGIBLE FOR COVERAGE

If a plan member enrolls in TRIP, they may enroll the following dependents: spouses; unmarried children age 26 and under; unmarried children age 26 and under that are full-time students, financially dependent for at least one-half of their support, and eligible to be claimed on income tax return; disabled children that have been continuously disabled from causes originating prior to age 26, financially dependent for at least one-half of their support, and eligible to be claimed on income tax return; and parents if they are financially dependent for at least one-half of their support and eligible to be claimed on income tax return.

ENROLLMENT TIMING

Members who have not previously enrolled in TRIP are eligible to enroll when they begin receiving pension benefits through TRS, during any annual open enrollment period, when turning 65 or becoming Medicare eligible or after losing coverage by a former plan. Members and beneficiaries who previously were enrolled in TRIP, and subsequently waive coverage, are only eligible to reenroll due to the loss of prior coverage by a former plan or at the attainment of age 65 or when Medicare eligible.

SURVIVING SPOUSE COVERAGE

Spouses of employees/retirees who die are eligible to maintain health insurance coverage until the surviving spouse's death. If the surviving spouse elects a monthly benefit, he or she becomes the member with the same TRIP rights.

MEDICARE

Coverage through TRIP becomes secondary to Medicare after Medicare eligibility has been reached. Members must enroll in Medicare Parts A and B to receive the reduced premium available to Medicare eligible participants. Benefits are coordinated so that Teachers' Choice Health Plan (TCHP) pays the 20 percent of approved charges not covered by Medicare. If the provider does not accept Medicare assignment, TCHP pays all amounts Medicare does not cover, up to the Medicare maximum limiting charges.

Prescription drug coverage provided by the plan is at least as valuable as benefits provided through Medicare Part D.

DENTAL AND VISION BENEFITS

Dental and vision benefits are not provided through TRIP.

FUNDING POLICY

Retiree healthcare benefits are funded on a pay-as-you-go basis. Medical benefits provided through TRIP are self-insured. The cost of TRIP is shared among active members, retirees, the individual school districts and the state. Contributions are made to the Teacher Health Insurance Security Fund. For fiscal year 7, active members contribute 1.12 percent of pay, school districts contribute 0.84 percent of pay and the State contributes 1.07 percent of pay. Retired members contribute through premium payments based on the coverage elected and the age of the member and dependents. The premium for retired members is not permitted to increase by more than 5.0 percent per year per statute.

Summary of Principal Plan Provisions

HEALTHCARE PLANS

Members may elect coverage in the TCHP, a managed care HMO plan or the Healthlink Open Access Plan (OAP). The TCHP is a traditional medical indemnity plan. There are six HMOs offering coverage that varies by location throughout the state. The OAP is a managed care plan that offers three benefit levels based on the provider used. A summary of the benefits provided under the three plans is shown on pages F-5 through F-7.

Premium rates for members depend on the coverage elected and whether a managed care plan is available in their County of residence. The following table gives the member premium amounts by type of coverage and availability of a managed care plan.

The premiums charged to members reflect approximately a 75 percent subsidy for members that elect a managed care plan or elect the TCHP plan if a managed care plan is either not available or only partially available. Members receive approximately a 50 percent subsidy if they elect the TCHP when a managed care plan is available. Medicare primary dependent beneficiaries enrolled in a managed care plan or in the TCHP when no managed care plan is available receive a premium subsidy.

TOTAL RETIREE ADVANTAGE ILLINOIS (TRAIL)

Annuitants and survivors who become enrolled in Medicare Parts A and B and meet all the criteria for enrollment in the Medicare Advantage Program will be required to choose a Medicare Advantage Plan or opt out of all TRIP coverage in the fall with an effective date of January 1, 2016.

Summary of Principal Plan Provisions

Monthly Premiums Plan Year July 1, 2016 through June 30, 2017

	Not Medicare Primary Under age 26	Not Medicare Primary Age 26-64	Not Medicare Primary Age 65 & Above	Medicare Primary All Ages ¹
Benefit recipient enrolled in any managed care plan	\$75.65	\$235.00	\$320.18	\$92.87
Benefit recipient enrolled in TCHP when a managed care plan is available	\$196.34	\$554.16	\$833.43	\$220.21
Benefit recipient enrolled in TCHP when a managed care plan is not available	\$98.17	\$277.09	\$416.72	\$110.11
Dependent beneficiary enrolled in any managed care plan	\$302.72	\$939.98	\$1,280.68	\$321.73
Dependent beneficiary enrolled in TCHP when a managed care plan is available	\$392.68	\$1,108.33	\$1,666.86	\$440.42
Dependent beneficiary enrolled in TCHP when a managed care plan is not available	\$392.68	\$1,108.33	\$1,666.86	\$330.32

Member Premium for Plan Year End June 30, 2018, increased by approximately 5 percent

Medicare Advantage Plan Monthly Premiums Effective January 1, 2017

	HMO Plans			PPO Plan
	Coventry Adventra	Health Alliance	Humana	United Healthcare
Member Rate	\$37.23	\$44.44	\$37.89	\$55.02
Dependent Rate	\$111.68	\$133.31	\$113.66	\$165.06

Medicare Advantage Plan Monthly Premiums Effective January 1, 2018

	HMO Plans			PPO Plan
	Coventry Adventra	Health Alliance	Humana	United Healthcare
Member Rate	\$39.09	\$46.66	\$39.78	\$57.77
Dependent Rate	\$117.27	\$139.97	\$119.35	\$173.31

¹ Member must enroll in Medicare Parts A and B to qualify for lower premiums.

Summary of Principal Plan Provisions

TCHP

<i>Plan Feature</i>	<i>In Network</i>	<i>Out of Network</i> ¹												
Annual Deductible	\$500 per enrollee	\$500 per enrollee												
Annual Out of Pocket Limit	\$1,200 per individual \$2,750 per family, per plan year	\$4,400 per individual \$8,800 per family, per plan year												
<u>Covered Services</u>	<u>Coinsurance</u>	<u>Coinsurance</u>												
-Office Visits	80% after deductible	60% after deductible												
-Emergency Room	\$400 copay, then 80% after deductible	\$400 copay, then 60% after deductible												
-Inpatient Services	\$200 copay, then 80% after deductible	\$400 copay, then 60% after deductible												
-Outpatient Services														
-Lab/X-ray	80% after plan deductible	60% after plan deductible												
-Other	80% after plan deductible	60% after plan deductible												
Prescription Drug Copays	<p>80% plan coinsurance with the following minimum and maximum copays (for a 30-day supply). The copays double for mail order prescriptions (for a 90-day supply). Annual out of pocket limit for prescriptions of \$1,500.</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 40%;"></th> <th style="width: 20%; text-align: center;">Minimum Copay</th> <th style="width: 20%; text-align: center;">Maximum Copay</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Generic Copay</td> <td style="text-align: center;">greater of 20% or \$7</td> <td style="text-align: center;">lesser of 20% or \$50</td> </tr> <tr> <td style="text-align: center;">Preferred Brand Copay</td> <td style="text-align: center;">greater of 20% or \$14</td> <td style="text-align: center;">lesser of 20% or \$100</td> </tr> <tr> <td style="text-align: center;">Nonpreferred Brand Copay</td> <td style="text-align: center;">greater of 20% or \$28</td> <td style="text-align: center;">lesser of 20% or \$150</td> </tr> </tbody> </table>			Minimum Copay	Maximum Copay	Generic Copay	greater of 20% or \$7	lesser of 20% or \$50	Preferred Brand Copay	greater of 20% or \$14	lesser of 20% or \$100	Nonpreferred Brand Copay	greater of 20% or \$28	lesser of 20% or \$150
	Minimum Copay	Maximum Copay												
Generic Copay	greater of 20% or \$7	lesser of 20% or \$50												
Preferred Brand Copay	greater of 20% or \$14	lesser of 20% or \$100												
Nonpreferred Brand Copay	greater of 20% or \$28	lesser of 20% or \$150												
Maximum Lifetime Benefit	Unlimited													

¹ Out of network claims covered only up to usual and customary amount.

Summary of Principal Plan Provisions

HMO

<i>Plan Feature</i>							
Annual Deductible	\$0						
Out of Pocket Maximum	\$3,000 individual \$6,000 family						
<u>Covered Services</u>	<u>Coinsurance</u>						
-Physicians Visits	\$20 Copay						
-Emergency Care	\$200 Copay						
-Inpatient Services	\$250 Copay						
-Outpatient Services	\$150 Copay						
Prescription Drug Copays (30-day supply)	<table style="margin-left: auto; margin-right: auto;"> <tr> <td style="padding-right: 20px;">Generic</td> <td style="text-align: right;">\$10</td> </tr> <tr> <td style="padding-right: 20px;">Preferred Brand</td> <td style="text-align: right;">\$20</td> </tr> <tr> <td style="padding-right: 20px;">Nonpreferred Brand</td> <td style="text-align: right;">\$40</td> </tr> </table>	Generic	\$10	Preferred Brand	\$20	Nonpreferred Brand	\$40
Generic	\$10						
Preferred Brand	\$20						
Nonpreferred Brand	\$40						
Maximum Lifetime Benefit	Unlimited						

Summary of Principal Plan Provisions

OAP

<i>Plan Feature</i>	<i>Tier I</i>	<i>Tier II</i>	<i>Tier III</i>
Annual Deductible	\$0	\$300 per enrollee	\$400 per enrollee
Annual Out of Pocket Limit	\$6,600 per enrollee \$13,200 per family Tier I and Tier II charges combined		N/A
<u>Covered Services</u>	<u>Coinsurance/Copay</u> ¹	<u>Coinsurance/Copay</u> ¹	<u>Coinsurance/Copay</u> ²
-Office Visits	\$20 copay	80%	60%
-Emergency Room	\$200 copay	\$200 copay	\$200 copay
-Inpatient Services	\$250 copay	\$300 copay, then 80%	\$400 copay, then 60%
-Outpatient Services			
-Lab/X-ray	100%	80%	60%
-Other	100%	80%	60%
Prescription Drug Copays (30-day supply)		Generic \$10 Preferred Brand \$20 Nonpreferred Brand \$40	
Maximum Lifetime Benefit	Unlimited	Unlimited	Unlimited

¹ Network charges.

² Usual and customary charges.

Summary of Principal Plan Provisions

TRAIL MAPD HMO

<i>Plan Feature</i>	
Annual Deductible	\$0
Out of Pocket Maximum	\$3,000 per enrollee
<u>Covered Services</u>	<u>Coinsurance</u>
-Physicians Visits	\$20 Copay
-Emergency Care	\$100 Copay Copay waived if admitted within 24 hours
-Inpatient Services	\$250 Copay
-Outpatient Services	\$150 Copay
Prescription Drug Copays ¹	Supply 30 days 60 days 90 days
	Tier 1 \$10 \$20 \$30
	Tier 2 \$20 \$40 \$60
	Tier 3 or 4 \$40 \$80 \$120
Maximum Lifetime Benefit	Unlimited

¹ To obtain a 90-day supply, copayments are 2 times the 30-day supply copayment under Coventry Advantra, 2.5 times the 30-day supply copayment under Health Alliance MAPD and 3 times the 30-day supply copayment under Health Alliance MAPD and Humana MAPD. Copayments are capped once a member reaches \$5,000 in "true out-of-pocket" prescription drug costs.

Summary of Principal Plan Provisions

TRAIL MAPD PPO

<i>Plan Feature</i>	<i>In Network</i>	<i>Out of Network</i>		
Annual Deductible	\$250 per enrollee	\$250 per enrollee		
Annual Out of Pocket Limit	\$1,000 per enrollee	\$1,000 per enrollee		
<u>Covered Services</u>	<u>Coinsurance</u>	<u>Coinsurance</u>		
-Office Visits	80% after deductible	80% after deductible		
-Emergency Room	\$100 Copay Copay waived if admitted within 24 hours	\$100 Copay Copay waived if admitted within 24 hours		
-Inpatient Services	80% after deductible	80% after deductible		
-Outpatient Services	80% after plan deductible	80% after plan deductible		
Prescription Drug Copays ¹	Supply	30 days	60 days	90 days
	Tier 1	\$10	\$20	\$30
	Tier 2	\$25	\$50	\$75
	Tier 3	\$50	\$100	\$150
Maximum Lifetime Benefit	Unlimited			

¹ Copayments are capped once a member reaches \$5,000 in "true out-of-pocket" prescription drug costs.

SECTION G

GLOSSARY

Glossary

Accrued Service. The service credited under the plan, which was rendered before the date of the actuarial valuation.

Actuarial Accrued Liability (AAL). The difference between (i) the actuarial present value of future plan benefits; and (ii) the actuarial present value of future normal cost, which is sometimes referred to as "accrued liability" or "past service liability."

Actuarial Assumptions. Estimates of future plan experience with respect to rates of mortality, disability, turnover, retirement, rate or rates of investment income and salary increases. Decrement assumptions (rates of mortality, disability, turnover and retirement) are generally based on past experience, often modified for projected changes in conditions. Economic assumptions (salary increases and investment income) consist of an underlying rate in an inflation-free environment plus a provision for a long-term average rate of inflation.

Actuarial Cost Method. A mathematical budgeting procedure for allocating the dollar amount of the "actuarial present value of future plan benefits" between the actuarial present value of future normal cost and the actuarial accrued liability. Sometimes referred to as the "actuarial funding method."

Actuarial Equivalent. A single amount or series of amounts of equal value to another single amount or series of amounts, computed on the basis of the rate(s) of interest and mortality tables used by the plan.

Actuarial Present Value. The amount of funds presently required to provide a payment or series of payments in the future. It is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Actuarial Value of Assets. The value of cash, investments, and other property belonging to a pension or OPEB plan, as used by the actuary for the purpose of an actuarial valuation.

Amortization. Paying off an interest-bearing liability by means of periodic payments of interest and principal, as opposed to paying it off with a lump sum payment.

Annual OPEB Expense. An accrual-basis measure of the periodic cost of an employer's participation in a defined OPEB plan.

Actuarially Determined Contribution (ADC). The ADC is the normal cost plus the portion of the unfunded actuarial accrued liability to be amortized in the current period. The ADC is an amount that is actuarially determined in accordance with the requirements so that, if paid on an ongoing basis, it would be expected to provide sufficient resources to fund both the normal cost for each year and the amortized unfunded liability.

Discount Rate. The rate used to adjust a series of future payments to reflect the time value of money.

Expected Net Employer Contributions. The difference between the age-adjusted premium or expected retiree healthcare claims and retired member's share of the premium. This amount is used to offset the Annual OPEB Cost during the fiscal year.

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Governmental Accounting Standards Board (GASB). GASB is the private, nonpartisan, nonprofit organization that works to create and improve the rules U.S. state and local governments follow when accounting for their finances and reporting them to the public.

Implicit Rate Subsidy. The de facto subsidy of retirees by permitting them to pay lower than age-adjusted premiums through the use of a single common or blended premium for both retirees and active employees.

Explicit Rate Subsidy. The portion of the premium paid by the employer. The premium may be based on the experience of active and retired members or retired members only.

Medical Trend Rate (Health Inflation). The increase in the plan's cost over time. Trend includes all elements that may influence a plan's cost, assuming those enrollments and the plan benefits do not change. Trend includes such elements as pure price inflation, changes in utilization, advances in medical technology and cost shifting.

Normal Cost. The annual cost assigned, under the actuarial funding method, to current and subsequent plan years. Sometimes referred to as "current service cost." Any payment toward the unfunded actuarial accrued liability is not part of the normal cost.

Other Postemployment Benefits (OPEB). OPEB are postemployment benefits other than pensions. OPEB generally takes the form of health insurance and dental, vision, prescription drugs or other healthcare benefits.

Pay-as-you-go funding. A method of financing benefits by making required payments only as they come due.

Plan member. A plan's membership includes active service employees, terminated employees who are eligible to receive benefits but are not receiving them, and retired employees and beneficiaries currently receiving benefits.

Pre-funding. A method of financing benefits by placing resources in trust as employees earn benefits so that the resources thus accumulated, along with related earnings, can be used to make benefit payments as they become due.

Present Value of all Projected Benefits. The present value of the cost to finance benefits payable in the future, discounted to reflect the expected effects of the time value of money and the probabilities of payment.

Projected Unit Credit Cost Method. A method under which the normal cost and actuarial accrued liability are directly proportional to the employee's service. The normal cost equals the present value of future benefits divided by projected service at retirement, and the actuarial accrued liability equals the present value of benefits multiplied by the ratio of service at valuation date to projected service at retirement.

Entry Age Normal Cost Method. A method under which the normal cost and actuarial accrued liability are directly proportional to the employee's salary. The normal cost rate equals the present value of future

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benefits at entry age divided by the present value of future salary at entry age. The normal cost at the member's attained age equals the normal cost rate at entry age multiplied by the salary at attained age. The actuarial accrued liability equals the present value of benefits at attained age less present value of future salaries at attained age multiplied by normal cost rate at entry age.

Qualified Plan. A qualified plan is an employer-sponsored retirement plan that qualifies for special tax treatment under Section 401(a) of the Internal Revenue Code.

Reserve Account. An account used to indicate that funds have been set-aside for a specific purpose and are not generally available for other uses.

Unfunded Actuarial Accrued Liability (UAAL). The difference between the actuarial accrued liability and valuation assets. Sometimes referred to as "unfunded accrued liability."

Valuation Assets. The value of current plan assets recognized for valuation purposes.