

City of Southgate Retiree Health Care Plan – Police and Fire Employees

GASB Statement No. 74, Financial Reporting for
Postemployment Benefit Plans Other Than Pension Plans
June 30, 2017



October 4, 2017

Mr. David Angileri, Finance Director
City of Southgate Retiree Health Care Plan - Police and Fire Employees
14400 Dix-Toledo Road
Southgate, MI 48195

Dear Mr. Angileri:

This report provides information on behalf of the City of Southgate Retiree Health Care Plan - Police and Fire Employees in connection with the Governmental Accounting Standards Board (GASB) Statement No. 74 "Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans."

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. 74. The Net OPEB Liability is not an appropriate measure for measuring the sufficiency of plan assets to cover the estimated cost of settling the employer's benefit obligation. The Net OPEB Liability is not an appropriate measure for assessing the need for or amount of future employer contributions. 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. 74 may produce significantly different results. This report may be provided to parties other than the City of Southgate Retiree Health Care Plan - Police and Fire Employees only in its entirety and only with the permission of the City of Southgate Retiree Health Care Plan - Police and Fire Employees. GRS is not responsible for unauthorized use of this report.

This report complements the actuarial valuation report prepared as of June 30, 2015, and information herein should be considered along with the information from that report, especially for additional discussions of the nature of actuarial calculations and for more information related to participant data; economic, demographic, health care trend, morbidity assumptions; and benefit provisions.

This report is based upon information, furnished to us by the City, concerning Other Postemployment Benefits (OPEB), active members, deferred vested members, retirees and beneficiaries, and financial data. This information was checked for internal consistency, but it was not audited.

Based on the available data, the information contained in this report is accurate and fairly represents the actuarial position of the City of Southgate Retiree Health Care Plan - Police and Fire Employees as of the reporting date. All calculations have been made in conformity with generally accepted actuarial principles and practices as well as the Actuarial Standards of Practice. If you have reason to believe that the information provided in this report is inaccurate, or is in any way incomplete, or if you need further information in order to make an informed decision on the subject matter of this report, please contact the authors of the report prior to making such decision.

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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.

The signing actuaries are independent of the plan sponsor.

Mark Buis and Rebecca L. Stouffer are Members of the American Academy of Actuaries (MAAA) and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

Respectfully submitted,



Mark Buis, FSA, FCA, EA, MAAA



Rebecca L. Stouffer, ASA, MAAA

MB/RLS:sc



Auditor's Note – This information is intended to assist in preparation of the financial statements of the City of Southgate Retiree Health Care Plan - Police and Fire Employees. Financial statements are the responsibility of management, subject to the auditor's review. Please let us know if the auditor recommends any changes.

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SECTION A

EXECUTIVE SUMMARY

Executive Summary as of June 30, 2017

	2017
Actuarial Valuation Date	June 30, 2015
OPEB Plan's Fiscal Year Ending Date (Reporting Date)	June 30, 2017
 Membership[^]	
Number of	
- Retirees and Beneficiaries	85
- Inactive, Nonretired Members	0
- Active Members	63
- Total	148
Covered Payroll	\$ 5,051,311
 Net OPEB Liability	
Total OPEB Liability	\$ 58,164,367
Plan Fiduciary Net Position	1,733,405
Net OPEB Liability	\$ 56,430,962
Plan Fiduciary Net Position as a Percentage of Total OPEB Liability	2.98 %
Net OPEB Liability as a Percentage of Covered Payroll	1,117.15 %
 Development of the Single Discount Rate	
Single Discount Rate	3.56 %
Long-Term Expected Rate of Return	3.56 %
Long-Term Municipal Bond Rate *	3.56 %

[^] Reflects count as of the actuarial valuation date corresponding to the reporting date.

* 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.

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.

Reporting under GASB Statement No. 74 is effective for plan fiscal years commencing after June 15, 2016.

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, and internal staff will be responsible for preparing that information to comply with this accounting standard.

Financial Statements

GASB Statement No. 74 requires defined benefit OPEB plans 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 following items as of the end of the OPEB plan’s reporting period:

- Assets;
- Receivables (deferred inflows and outflows of resources);
- Investments;
- Liabilities; and
- Fiduciary net position (assets, plus deferred outflows, minus liabilities, minus deferred inflows).

The *statement of changes in fiduciary net position* presents the following for the plan’s reporting period:

- Additions, such as contributions and investment income;
- Deductions, such as benefit payments and expenses; and
- Net increase or decrease in the fiduciary net position (the difference between additions and deductions).

Notes to Financial Statements

GASB Statement No. 74 also requires the notes of the plan's financial statements to include additional disclosure information. This disclosure information should include:

- **Plan Description:**
 - 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.
 - The number of participating employers (if agent or cost-sharing OPEB plan) and the number of nonemployer contributing entities.
 - The composition of the OPEB plan's Board and the authority under which benefit terms may be amended.
 - The number of plan members by category and if the plan is closed.
 - The authority under which benefit terms are established or may be changed, the types of benefit provided and the classes of plan members covered. A brief description of the benefits and the description of automatic postemployment benefit changes and the sharing of benefit-related costs with inactive plan members.
 - A brief description of contribution requirements, including (a) identification of the authority under which contribution requirements of employers, nonemployer contributing entities, and plan members are established or may be amended; (b) the contribution rates of the employer, nonemployer contributing entities, and plan members; and (c) legal or contractual maximum contribution rates. If the OPEB plan of the entity that administers the OPEB plan has the authority to establish or amend contribution requirements, disclose the basis for determining contributions.
- **Plan Investments:**
 - A description of investment policies, including procedures for making and amending investment decisions; policies for asset allocation; and description of any significant changes in investment policy occurring during the reporting period.
 - Identification of investments that represent 5% or more of the fiduciary net position.
 - The annual money-weighted rate of return on the OPEB plan investments.
- **Receivables:**
 - The terms of any long-term contracts for contributions to the OPEB plan and the outstanding balance on any such long-term contracts.
- **Allocated insurance contracts excluded from OPEB plan assets**
- **Reserves:**
 - A description of the policy related to reserves;
 - The authority for the reserve policy;
 - The conditions under which the reserves can be used; and
 - The balances of the reserves.

In addition, Single-Employer and Cost-Sharing OPEB plans should disclose the following information in notes to financial statements:

- The components of the net OPEB liability:
 - The total OPEB liability;
 - The fiduciary net position;
 - The net OPEB liability; and
 - The OPEB plan's fiduciary net position as a percentage of the total OPEB liability.
- Significant assumptions and other inputs used to measure the total OPEB liability:
 - Significant assumptions include inflation, healthcare cost trend rates, salary changes, ad hoc postemployment benefit changes, and the sharing of benefit-related costs with inactive plan members.
 - If applicable, the patterns of practice relied upon for projecting the sharing of benefit-related costs with inactive plan members.
 - The source of the assumptions for mortality.
 - The dates of experience studies on which assumption are based.
- Measure of the net OPEB liability using +/- 1% on the healthcare trend rate.
- On the discount rate:
 - The discount rate used and the change in the discount rate since the prior fiscal year-end.
 - Assumptions about projected cash flows.
 - The long-term expected rate of return on OPEB investments and a description of how it was determined.
 - The municipal bond rate used and the source of that rate.
 - The periods of projected benefit payments to which the long-term expected rate of return are used.
 - The assumed asset allocation of the portfolio and the long-term expected real rate of return for each major asset class, and whether the returns are arithmetic or geometric.
 - Measure of the net OPEB liability using +/- 1% on the discount rate.
- The date of the valuation and, if applicable, the fact that update procedures were used to roll forward the total OPEB liability.

Required Supplementary Information

For Single-Employer and Cost-Sharing OPEB Plans, 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 based on the plan's funding policy along with the significant methods and assumptions used in calculating the actuarially determined contributions; and
- The annual money-weighted rate of return on OPEB plan investments for each year.

For Agent OPEB Plans, GASB Statement No. 74 requires a 10-year history of the annual money-weighted rate of return on OPEB plan investments.

Notes to the required schedules should include factors that significantly affect trends in the amounts reported (for example, changes of benefit terms, changes in the size or composition of the population covered, or the use of different assumptions). Information about investment-related factors that significantly affect trends in the amounts reported should be limited to those factors over which the OPEB plan or the participating governments have influence.

Measurement of the Net OPEB Liability

The net OPEB liability is to be measured as the total OPEB liability, less the amount of the OPEB plan's fiduciary net position. In actuarial terms, this will be the accrued liability less the market value of assets (not the smoothed actuarial value of assets that is often encountered in actuarial valuations performed to determine the employer's contribution requirement). The net OPEB liability should be measured as of the OPEB plan's most recent fiscal year end.

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. If the actuarial valuation is not calculated as of the plan's fiscal year end, the total OPEB liability is required to be rolled forward from the actuarial valuation date to the OPEB plan's fiscal year end. If update procedures are used to roll forward the total OPEB liability, the date of the actuarial valuation must be no more than 24 months earlier than the OPEB plan's most recent fiscal year-end.

The total OPEB liability shown in this report is based on an actuarial valuation performed as of June 30, 2015 and a measurement date of June 30, 2017.

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 3.56%; 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 3.56%. The single discount rate is equal to the long-term municipal bond rate and is supported by the current investment policy.

Actuarial Assumptions

The actuarial assumptions used to value the liabilities are outlined in detail in Section H. The assumptions include details on the healthcare trend assumption, as well as the cost method used to develop the OPEB expense. Certain Demographic assumptions were selected or affirmed based on the experience study covering the five year period ending June 30, 2014, as conducted for the pension retirement plan. Price and base wage assumptions and mortality assumptions were based upon general conditions discussed in the report dated September 9, 2016. The long term expected rate of return was set to the municipal bond rate on the basis of the investment policy.

Future Uncertainty or Risk

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

- Actual medical trend differing from expected;
- Changes in the healthcare plan designs offered to active and retired members; and
- Participant behavior differing from expected, e.g.,
 - Elections at retirement;
 - One-person versus two-person coverage elections; and
 - Time of retirement or termination.

Benefits Valued

The benefit provisions that were valued are described in Section E. The 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. If the plan summary is not in accordance with the actual provisions, please alert the actuaries immediately, so they can be sure the proper provisions are valued.

Effective Date and Transition

GASB Statement No. 74 is effective for an OPEB plan's fiscal years beginning after June 15, 2016.

SECTION B

FINANCIAL STATEMENTS

Auditor's Note – This information is intended to assist in preparation of the financial statements of the City of Southgate Retiree Health Care Plan - Police and Fire Employees. Financial statements are the responsibility of management, subject to the auditor's review. Please let us know if the auditor recommends any changes.

Statement of Fiduciary Net Position as of June 30, 2017

	2017
Assets	
Cash and Deposits	\$ 1,646,374
Receivables	
Accounts Receivable - Sale of Investments	\$ 0
Accrued Interest and Other Dividends	0
Contributions	-
Accounts Receivable - Other	93,040
Total Receivables	\$ 93,040
Investments	
Fixed Income	\$ 0
Domestic Equities	0
International Equities	0
Real Estate	0
Other - Diversified Investment Pool	0
Total Investments	\$ 0
Total Assets	\$ 1,739,414
Liabilities	
Payables	
Accounts Payable - Purchase of Investments	\$ 0
Accrued Expenses	0
Accounts Payable - Other	6,009
Total Liabilities	\$ 6,009
Net Position Restricted for OPEB	\$ 1,733,405

Statement of Changes in Fiduciary Net Position for Year Ended June 30, 2017

	2017
Additions	
Contributions	
Employer	\$ 2,045,006
Nonemployer contributing entities	0
Active Employees	0
Other	0
Total Contributions	\$ 2,045,006
Investment Income	
Net Appreciation in Fair Value of Investments	\$ 0
Interest and Dividends	3,313
Less Investment Expense	0
Net Investment Income	\$ 3,313
Other	\$ 0
Total Additions	\$ 2,048,319
 Deductions	
Benefit Payments	\$ 1,787,754
OPEB Plan Administrative Expense	0
Other	0
Total Deductions	\$ 1,787,754
Net Increase in Net Position	\$ 260,565
 Net Position Restricted for OPEB	
Beginning of Year	\$ 1,472,840
End of Year	\$ 1,733,405

SECTION C

REQUIRED SUPPLEMENTARY INFORMATION

Auditor's Note – This information is intended to assist in preparation of the financial statements of the City of Southgate Retiree Health Care Plan - Police and Fire Employees. Financial statements are the responsibility of management, subject to the auditor's review. Please let us know if the auditor recommends any changes.

Schedules of Required Supplementary Information

Schedule of Changes in Net OPEB Liability and Related Ratios Multiyear

Fiscal year ending June 30,	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
Total OPEB liability										
Service cost	\$ 1,375,918									
Interest on the total OPEB liability	2,007,629									
Changes of benefit terms	0									
Difference between expected and actual experience	(31,408)									
Changes of assumptions	0									
Benefit payments, including refunds of employee contributions	(1,787,754)									
Net change in total OPEB liability	1,564,385									
Total OPEB liability - beginning	56,599,982									
Total OPEB liability - ending (a)	\$ 58,164,367									
Plan fiduciary net position										
Employer contributions	\$ 2,045,006									
Nonemployer contributing entities contributions	0									
Employee contributions	0									
OPEB plan net investment income	3,313									
Benefit payments, including refunds of employee contributions	(1,787,754)									
OPEB plan administrative expense	0									
Other	0									
Net change in plan fiduciary net position	260,565									
Plan fiduciary net position - beginning	1,472,840									
Plan fiduciary net position - ending (b)	\$ 1,733,405									
Net OPEB liability - ending (a) - (b)	\$ 56,430,962									
Plan fiduciary net position as a percentage of total OPEB liability	2.98 %									
Covered-employee payroll	\$ 5,051,311									
Net OPEB liability as a percentage of covered-employee payroll	1,117.15 %									
Notes to Schedule:										
N/A										

Schedules of Required Supplementary Information

Schedule of the Net OPEB Liability Multiyear

Last 10 Fiscal Years

FY Ending June 30,	Total OPEB Liability	Plan Net Position	Net OPEB Liability	Plan Net Position as a % of Total OPEB Liability	Covered Payroll	Net OPEB Liability as a % of Covered Payroll
2008						
2009						
2010						
2011						
2012						
2013						
2014						
2015						
2016						
2017	\$ 58,164,367	\$ 1,733,405	\$ 56,430,962	2.98 %	\$ 5,051,311	1,117.15 %

Schedule of Contributions Multiyear

Last 10 Fiscal Years

<u>FY Ending June 30,</u>	<u>Actuarially Determined Contribution</u>	<u>Actual Contribution</u>	<u>Contribution Deficiency (Excess)</u>	<u>Covered Payroll</u>	<u>Actual Contribution as a % of Covered Payroll</u>
2008					
2009					
2010					
2011					
2012					
2013					
2014					
2015					
2016					
2017	\$ 3,125,869	\$ 2,045,006	\$ 1,080,863	\$ 5,051,311	40.48 %

Notes to Schedule of Contributions

Notes Actuarially determined contribution amounts are calculated as of June 30 of odd numbered years. The valuation date is 12 months prior to the fiscal year end of even numbered fiscal years and 24 months prior to the fiscal year end of odd numbered fiscal years.

Methods and Assumptions Used to Determine Contribution Amounts for the Fiscal Year Ending June 30, 2017*:

Actuarial Cost Method	Entry Age Normal
Amortization Method	Level Percent of Pay, Open
Remaining Amortization Period	30 years
Asset Valuation Method	Market Value of Assets
Price Inflation	2.75%
Salary Increases	3.5% to 6.4%, including inflation
Investment Rate of Return	4.00%, net of OPEB plan investment expense.
Retirement Age	Experience-based table of rates that are specific to the type of eligibility condition. Last updated for the June 30, 2016 valuation, pursuant to the experience study of the 5-year period ending 2014.

Mortality Post-Retirement: RP-2014 Healthy Annuitant Generational Mortality Tables with blue collar adjustments and extended via cubic spline.
 Pre-Retirement: RP-2014 Employee Generational Mortality Tables with blue collar adjustments and extended via cubic spline.
 Post-Retirement Disabled: RP-2014 Disabled Mortality Tables with blue collar adjustments and extended via cubic spline.
 All tables are adjusted backwards to 2006 with the MP-2014 scale. A base year of 2006 is utilized with future mortality improvements assumed each year using scale MP-2015.

Health Care Trend Rates 9.0% trend for the first year, then gradually decreasing to an ultimate trend of 3.50%.

Aging factors Based on the 2013 SOA Study "Health Care Costs - From Birth to Death"

Other Information:

Notes N/A

** Based on valuation assumptions used in the 2015 valuation.*

Schedule of Investment Returns Multiyear

Last 10 Fiscal Years

<u>FY Ending June 30,</u>	<u>Annual Return¹</u>
2008	
2009	
2010	
2011	
2012	
2013	
2014	
2015	
2016	
2017	18.39 %

¹ Annual money-weighted rate of return, net of investment expenses.

SECTION D

NOTES TO FINANCIAL STATEMENTS

Auditor's Note – This information is intended to assist in preparation of the financial statements of the City of Southgate Retiree Health Care Plan - Police and Fire Employees. Financial statements are the responsibility of management, subject to the auditor's review. Please let us know if the auditor recommends any changes.

Single Discount Rate

A Single Discount Rate of 3.56% was used to measure the total OPEB liability. This Single Discount Rate was based on the expected rate of return on OPEB plan investments of 3.56%. The single discount rate is equal to the long-term municipal bond rate and is supported by the current investment policy.

Summary of Membership Information[#]

The following table provides a summary of the number of participants in the plan:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	85
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	-
Active Plan Members	<u>63</u>
Total Plan Members	148

[#] As of the Actuarial Valuation Date corresponding to the June 30, 2017 reporting date. GRS does not have the membership counts as of June 30, 2017. The City of Southgate staff and auditors may decide that providing membership counts as of the valuation date is sufficient. Alternatively, the City may decide to update the membership counts to be as of the Plan's fiscal year end.

Sensitivity of Net OPEB Liability

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 3.56%, 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:

Sensitivity of Net OPEB Liability to the Single Discount Rate Assumption

1% Decrease	Current Single Discount Rate Assumption	1% Increase
2.56%	3.56%	4.56%
\$ 66,571,453	\$ 56,430,962	\$ 48,469,507

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

Sensitivity of Net OPEB Liability to the Healthcare Cost Trend Rate Assumption

1% Decrease	Current Healthcare Cost Trend Rate Assumption	1% Increase
\$ 46,988,221	\$ 56,430,962	\$ 68,740,841

SECTION E

SUMMARY OF BENEFITS

Summary of Benefits

This report complements the actuarial valuation report prepared as of June 30, 2015, and information herein should be considered along with the information from that report, related to police and fire employees, especially for additional discussions of the nature of actuarial calculations and for more information related to benefit provisions.

SECTION F

DEVELOPMENT OF BASELINE CLAIMS COSTS

Development of Baseline Claims Costs

This report complements the actuarial valuation report prepared as of June 30, 2015, and information herein should be considered along with the information from that report, related to police and fire employees, especially for additional discussions of the nature of actuarial calculations and for more information related to baseline claims costs.

SECTION G

SUMMARY OF PARTICIPANT DATA

Summary of Participant Data

This report complements the actuarial valuation report prepared as of June 30, 2015, and information herein should be considered along with the information from that report, related to police and fire employees, especially for additional discussions of the nature of actuarial calculations and for more information related to participant data.

SECTION H

VALUATION METHODS AND ACTUARIAL ASSUMPTIONS

Valuation Methods and Actuarial Assumptions

This report complements the actuarial valuation report prepared as of June 30, 2015, and information herein should be considered along with the information from that report, related to police and fire employees, especially for additional discussions of the nature of actuarial calculations and for more information related to valuation methods and actuarial assumptions. Differences from the actuarial report are noted below:

Financing of Unfunded Actuarial Accrued Liabilities N/A

Amortization Factors N/A

Assumption Rationale:

Certain Demographic assumptions were selected or affirmed based on the experience study covering the five year period ending June 30, 2014, as conducted for the pension retirement plan.

Price and base wage assumptions and mortality assumptions were based upon general conditions discussed in the report dated September 9, 2016.

The long term expected rate of return was set to the municipal bond rate on the basis of the investment policy.

The **rate of investment** return was 3.56% a year, compounded annually net after investment expenses.

Miscellaneous and Technical Assumptions

This report complements the actuarial valuation report prepared as of June 30, 2015, and information herein should be considered along with the information from that report, related to police and fire employees, especially for additional discussions of the nature of actuarial calculations and for more information related to miscellaneous and technical assumptions.

Roll-Forward Disclosure

The total OPEB liability shown in this report is based on an actuarial valuation performed as of June 30, 2015 and a reporting date of June 30, 2017. The roll-forward procedure increases the June 30, 2015 actuarial accrued liability with normal cost and interest and decreases it with expected benefit payments.

SECTION I

DISCUSSION OF THE SINGLE DISCOUNT RATE

Discussion of the Single Discount Rate

GASB Statement No. 74 includes a specific requirement for the discount rate that is used for the purpose of the measurement of the Total OPEB Liability. This rate considers the ability of the fund to meet benefit obligations in the future. To make this determination, employer contributions, employee contributions, benefit payments, expenses and investment returns are projected into the future. The Plan Net Position (assets) in future years can then be determined and compared to its obligation to make benefit payments in those years. As long as assets are projected to be on hand in a future year, the assumed valuation discount rate is used. In years where assets are not projected to be sufficient to meet benefit payments, the use of a municipal bond rate is required, as described in the following paragraph.

The Single Discount Rate (SDR) is equivalent to applying these two rates to the benefits that are projected to be paid during the different time periods. The SDR reflects (1) the long-term expected rate of return on OPEB plan investments (during the period in which the 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 3.56%; the municipal bond rate is 3.56%; and the resulting SDR is 3.56%.

Projections are not needed since both the long term rate of return and bond rate are equivalent.

SECTION J

GLOSSARY OF TERMS

Glossary of Terms

Accrued Service	Service credited under the system that was rendered before the date of the actuarial valuation.
Actuarial Accrued Liability (AAL)	The AAL is the difference between the actuarial present value of all benefits and the actuarial value of future normal costs. The definition comes from the fundamental equation of funding which states that the present value of all benefits is the sum of the Actuarial Accrued Liability and the present value of future normal costs. The AAL may also be referred to as "accrued liability" or "actuarial liability."
Actuarial Assumptions	These assumptions are estimates of future experience with respect to rates of mortality, disability, turnover, retirement, rate or rates of investment income and compensation increases. Actuarial assumptions are generally based on past experience, often modified for projected changes in conditions. Economic assumptions (compensation increases, payroll growth, inflation and investment return) consist of an underlying real rate of return plus an assumption 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 the OPEB trust benefits between future normal cost and actuarial accrued liability. The actuarial cost method may also be referred to as the actuarial funding method.
Actuarial Equivalent	A single amount or series of amounts of equal actuarial value to another single amount or series of amounts, computed on the basis of appropriate actuarial assumptions.
Actuarial Gain (Loss)	The difference in liabilities between actual experience and expected experience during the period between two actuarial valuations is the gain (loss) on the accrued liabilities.
Actuarial Present Value (APV)	The amount of funds currently required to provide a payment or series of payments in the future. The present value is determined by discounting future payments at predetermined rates of interest and probabilities of payment.
Actuarial Valuation	The actuarial valuation report determines, as of the actuarial valuation date, the service cost, total OPEB liability, and related actuarial present value of projected benefit payments for OPEB.
Actuarial Valuation Date	The date as of which an actuarial valuation is performed.

Glossary of Terms

Actuarially Determined Contribution (ADC) or Annual Required Contribution (ARC)	A calculated contribution into an OPEB plan for the reporting period, most often determined based on the funding policy of the plan. Typically the Actuarially Determined Contribution has a normal cost payment and an amortization payment.
Amortization Method	The method used to determine the periodic amortization payment may be a level dollar amount, or a level percent of pay amount. The period will typically be expressed in years, and the method will either be “open” (meaning, reset each year) or “closed” (the number of years remaining will decline each year).
Amortization Payment	The amortization payment is the periodic payment required to pay off an interest-discounted amount with payments of interest and principal.
Cost-of-Living Adjustments	Postemployment benefit changes intended to adjust benefit payments for the effects of inflation.
Cost-Sharing Multiple-Employer Defined Benefit OPEB Plan (cost-sharing OPEB plan)	A multiple-employer defined benefit OPEB plan in which the OPEB obligations to the employees of more than one employer are pooled and OPEB plan assets can be used to pay the benefits of the employees of any employer that provides benefits through the OPEB plan.
Covered-Employee Payroll	The payroll of employees that are provided with benefits through the OPEB plan.
Deferred Inflows and Outflows	The deferred inflows and outflows of OPEB resources are amounts used under GASB Statement No. 74 in developing the annual OPEB expense. Deferred inflows and outflows arise with differences between expected and actual experiences; changes of assumptions. The portion of these amounts not included in the OPEB expense should be included in the deferred inflows or outflows of resources.
Discount Rate	For GASB purposes, the discount rate is the single rate of return that results in the present value of all projected benefit payments to be equal to the sum of the funded and unfunded projected benefit payments, specifically: <ol style="list-style-type: none">1. The benefit payments to be made while the OPEB plans’ fiduciary net position is projected to be greater than the benefit payments that are projected to be made in the period; and2. The present value of the benefit payments not in (1) above, discounted using the municipal bond rate.

Glossary of Terms

Entry Age Actuarial Cost Method (EAN)	The EAN is a cost method for allocating the costs of the plan between the normal cost and the accrued liability. The actuarial present value of the projected benefits of each individual included in an actuarial valuation is allocated on a level basis (either level dollar or level percent of pay) over the earnings or service of the individual between entry age and assumed exit ages(s). The portion of the actuarial present value allocated to a valuation year is the normal cost. The portion of this actuarial present value not provided for at a valuation date by the actuarial present value of future normal costs is the actuarial accrued liability. The sum of the accrued liability plus the present value of all future normal costs is the present value of all benefits.
Fiduciary Net Position	The fiduciary net position is the market value of the assets of the trust dedicated to the defined benefit provisions.
GASB	The Governmental Accounting Standards Board is an organization that exists in order to promulgate accounting standards for governmental entities.
Long-Term Expected Rate of Return	The long-term rate of return is the expected return to be earned over the entire trust portfolio based on the asset allocation of the portfolio.
Money-Weighted Rate of Return	The money-weighted rate of return is a method of calculating the returns that adjusts for the changing amounts actually invested. For purposes of GASB Statement No. 74, the money-weighted rate of return is calculated as the internal rate of return on OPEB plan investments, net of OPEB plan investment expense.
Multiple-Employer Defined Benefit OPEB Plan	A multiple-employer plan is a defined benefit OPEB plan that is used to provide OPEB payments to the employees of more than one employer.
Municipal Bond Rate	The Municipal Bond Rate is the discount rate to be used for those benefit payments that occur after the assets of the trust have been depleted.
Net OPEB Liability (NOL)	The NOL is the liability of employers and non-employer contributing entities to plan members for benefits provided through a defined benefit OPEB plan.
Non-Employer Contributing Entities	Non-employer contributing entities are entities that make contributions to an OPEB plan that is used to provide OPEB payments to the employees of other entities. For purposes of the GASB accounting statements, plan members are not considered non-employer contributing entities.

Glossary of Terms

Normal Cost	The portion of the actuarial present value allocated to a valuation year is called the normal cost. For purposes of application to the requirements of this Statement, the term normal cost is the equivalent of service cost.
Other Postemployment Benefits (OPEB)	All postemployment benefits other than retirement income (such as death benefits, life insurance, disability, and long-term care) that are provided separately from a pension plan, as well as postemployment healthcare benefits regardless of the manner in which they are provided. Other post-employment benefits do not include termination benefits.
Real Rate of Return	The real rate of return is the rate of return on an investment after adjustment to eliminate inflation.
Service Cost	The service cost is the portion of the actuarial present value of projected benefit payments that is attributed to a valuation year.
Total OPEB Expense	The total OPEB expense is the sum of the following items that are recognized at the end of the employer's fiscal year: <ol style="list-style-type: none">1. Service Cost2. Interest on the Total OPEB Liability3. Current-Period Benefit Changes4. Employee Contributions (made negative for addition here)5. Projected Earnings on Plan Investments (made negative for addition here)6. OPEB Plan Administrative Expense7. Other Changes in Plan Fiduciary Net Position8. Recognition of Outflow (Inflow) of Resources due to Liabilities9. Recognition of Outflow (Inflow) of Resources due to Assets
Total OPEB Liability (TOL)	The TOL is the portion of the actuarial present value of projected benefit payments that is attributed to past periods of member service.
Unfunded Actuarial Accrued Liability (UAAL)	The UAAL is the difference between actuarial accrued liability and valuation assets.
Valuation Assets	The valuation assets are the assets used in determining the unfunded liability of the plan. For purposes of GASB Statement Nos. 74 and 75, the valuation assets are equal to the market value of assets.