

# City of Tyler

## Retiree Health Care Plan

GASB Statements No. 74 and No. 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions

Fiscal Year Ending September 30, 2019



February 3, 2020

Mr. Keidric Trimble  
Director of Finance/CFO  
City of Tyler  
304 N. Border, P.O. Box 2039  
Tyler, TX 75702

Dear Mr. Trimble:

This report provides information on behalf of the City of Tyler Retiree Health Care Plan in connection with the Governmental Accounting Standards Board (GASB) Statements No. 74 and No. 75. GASB Statement No. 74 is the accounting standard, which applies to other postemployment benefits (OPEB) plans that are administered through trusts or equivalent arrangements. GASB Statement No. 75 establishes accounting and financial reporting requirements for state and local government employers that provide their employees with postemployment benefits other than pensions.

The calculation of the liability associated with the benefits described in this report was performed for the purpose of satisfying the requirements of GASB Statements No. 74 and No. 75. The calculation of the plan's liability for this report is not applicable for funding purposes of the plan. A calculation of the plan's liability for purposes other than satisfying the requirements of GASB Statements No. 74 and No. 75 may produce significantly different results. This report may be provided to parties other than the City of Tyler only in its entirety and only with the permission of the City. GRS is not responsible for unauthorized use of this report.

This report complements the actuarial valuation report prepared as of December 31, 2017, and information herein should be considered along with the information from that report, especially for additional information related to participant data, benefit provisions and actuarial assumptions.

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 Tyler Retiree Health Care Plan 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 author of the report prior to making such decision.

Mr. Keidric Trimble

February 3, 2020

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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 individuals are independent of the plan sponsor.

Mr. Riazi and Mr. Nguyen 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,



Mehdi Riazi, FSA, FCA, EA, MAAA



Neil Nguyen, ASA, MAAA

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## SECTION A

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### EXECUTIVE SUMMARY

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

# Executive Summary

Actuarial Valuation Date	December 31, 2017
Measurement Date of the Net OPEB Liability	December 31, 2018
Plan's Fiscal Year Ending Date	December 31, 2018
Employer's Fiscal Year Ending Date	September 30, 2019

**Membership\***

Number of	
- Retirees and Beneficiaries	443
- Inactive, Nonretired Members	0
- Active Members	807
- Total	1,250
Covered Payroll	\$ 45,363,280

**Net OPEB Liability**

Total OPEB Liability	\$ 36,562,163
Plan Fiduciary Net Position*	10,824,428
Net OPEB Liability	\$ 25,737,735
Plan Fiduciary Net Position as a Percentage of Total OPEB Liability	29.61 %
Net OPEB Liability as a Percentage of Covered Payroll	56.74 %

**Development of the Single Discount Rate**

Single Discount Rate	6.50 %
Long-Term Expected Rate of Investment Return	6.50 %
Long-Term Municipal Bond Rate**	3.71 %

<b>Total OPEB Expense</b>	<b>\$ 2,322,428</b>
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**Balances of Deferred Outflows and Deferred Inflows of Resources Related to OPEB**

	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference between expected and actual experience, liability	\$ 0	\$ 617,851
Changes in assumptions	0	0
Difference between expected and actual experience, assets	693,511	0
Contributions subsequent to the measurement date	(423,304)	
<b>Total</b>	<b>\$ 270,207</b>	<b>\$ 617,851</b>

\* The membership counts provided above are as of the valuation date.

\*\* Source: Fixed-income municipal bonds with 20 years to maturity that include only federally tax-exempt municipal bonds as reported in the Fidelity "20-Year Municipal GO AA Index" as of December 31, 2018.

# 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.” Similarly, GASB Statement No. 75 establishes standards for state and local government employers (as well as non-employer contributing entities) to account for and disclose net OPEB liability, OPEB expense, and other information associated with providing OPEB to their employees (and former employees) on their financial statements.

GASB Statements No. 74 and No. 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 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.

## Financial Statements

For plans that have formal trusts, 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, the net OPEB liability is analogous to the actuarial accrued liability less the market value of assets.

GASB Statement No. 75 states the employer contributions made to the OPEB plan subsequent to the measurement date and before the end of the employer’s reporting period should be reported as a deferred outflow of resources.

The 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.

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.

## 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 Statements No. 74 and No. 75 require the notes of the financial statements for employers and OPEB plans 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 pension liability;
- The net OPEB liability using +/- 1% on the discount rate;
- The net OPEB liability using +/- 1% on the healthcare trend rate;
- Significant assumptions and methods used to calculate the total pension 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.



## 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 based on the plan's funding policy.
- 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.

## Timing and Frequency of the Actuarial Valuation

An actuarial valuation to determine the total OPEB liability is required to be performed at least every two years. For the employer's financial reporting purposes, the net OPEB liability and OPEB expense should be measured as of the employer's "measurement date" which may not be earlier than the employer's prior fiscal year end-date. If the actuarial valuation used to determine the total pension liability is not calculated as of the measurement date, the total OPEB liability is required to be rolled forward from the actuarial valuation date to the measurement date.

The total OPEB liability shown in this report is based on an actuarial valuation performed as of December 31, 2017. Update procedures were used to roll forward the total OPEB liability to the measurement date of December 31, 2018.

## 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 6.50%; the municipal bond rate is 3.71% (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 6.50%.

The City is expected to consistently fund the actuarially determined employer contribution, which uses a closed amortization period. As a result, the plan's fiduciary net position is expected to be sufficient to pay all future benefits.

## Actuarial Assumptions

The demographic assumptions are based on the assumptions that were developed for the defined benefit plans in which the City participates (TMRS and Tyler Firefighters' Relief and Retirement Fund). The assumptions for TMRS are based on the experience study covering the four-year period ending December 31, 2014 as conducted for the Texas Municipal Retirement System (TMRS). The assumptions for the Tyler Firefighters' Relief and Retirement Fund are based on the pension valuation report as of December 31, 2017.

## 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;
  - Time of retirement or termination; and
  - Catastrophic claims.

## Benefits Valued

The benefit provisions are the same as those used in the valuation report as of December 31, 2017.

## Effective Date and Transition

GASB Statements No. 74 and No. 75 are effective for fiscal years beginning after June 15, 2016 and June 15, 2017, respectively.

**SECTION B**

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**PLAN FINANCIAL STATEMENTS**

## Statement of Fiduciary Net Position

	<u>December 31, 2018</u>
<b>Assets</b>	
Cash and Deposits	\$ 554,514
Investments	
Mutual Funds	\$ 10,269,914
Total Investments	<u>\$ 10,269,914</u>
<b>Total Assets</b>	<u>\$ 10,824,428</u>
<b>Liabilities</b>	
<b>Total Liabilities</b>	<u>\$ 0</u>
<b>Net Position Restricted for OPEB</b>	<u>\$ 10,824,428</u>

## Statement of Changes in Fiduciary Net Position

	<b>December 31, 2018</b>
<b>Additions</b>	
Contributions	
Employer	\$ 2,880,184
Other	0
Total Contributions	\$ 2,880,184
Investment Income	
Net Appreciation in Fair Value of Investments	\$ (726,437)
Interest and Dividends	207,704
Investment Expense	(21,223)
Net Investment Income	\$ (539,956)
Other Income	\$ 0
<b>Total Additions</b>	<b>\$ 2,340,228</b>
 <b>Deductions</b>	
Benefit Payments	\$ 2,005,477
OPEB Plan Administrative Expense*	29,550
Other	0
<b>Total Deductions</b>	<b>\$ 2,035,027</b>
<b>Net Increase in Net Position</b>	<b>\$ 305,201</b>
 <b>Net Position Restricted for OPEB</b>	
Beginning of Year	\$ 10,519,227
End of Year	\$ 10,824,428

Consistent with the requirements of GASB Statement No. 74, the employer contributions include “amounts for OPEB as the benefits come due that will not be reimbursed to the employer using OPEB plan assets.” The employer contributions of \$2,880,184 shown above include trust contributions of \$3,428,129 plus the benefit payments paid by the City of \$2,005,477 minus the trust reimbursements of \$2,553,422. Please see page C-1 for the development of the benefit payments amount.

\*A \$1 adjustment was made to the OPEB Plan Administrative Expenses as a result of the beginning of year assets being \$1 different than the end of year assets reported last year.

**SECTION C**

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**FINANCIAL SCHEDULES**

## Schedule of Changes in Net OPEB Liability

### Fiscal Year Ending September 30, 2019

	Total OPEB Liability	Plan Fiduciary Net Position	Net OPEB Liability
<b>Beginning balance</b>	\$ 36,329,155	\$ 10,519,227	\$ 25,809,928
Service cost	656,975		656,975
Interest on the total OPEB liability	2,317,569		2,317,569
Changes of benefit terms	0		0
Difference between expected and actual experience	(736,059)		(736,059)
Changes of assumptions	0		0
Employer contributions		2,880,184	(2,880,184)
Net investment income		(539,956)	539,956
Benefit payments	(2,005,477)	(2,005,477)	0
Administrative expense		(29,550)	29,550
Other		0	0
<b>Net changes</b>	<u>233,008</u>	<u>305,201</u>	<u>(72,193)</u>
<b>Ending balance</b>	<u>\$ 36,562,163</u>	<u>\$ 10,824,428</u>	<u>\$ 25,737,735</u>

Ending balances are as of the measurement date, December 31, 2018.

Consistent with the requirements of GASB Statement No. 74, the employer contributions include “amounts for OPEB as the benefits come due that will not be reimbursed to the employer using OPEB plan assets.” The employer contributions of \$2,880,184 shown above include trust contributions of \$3,428,129 plus the benefit payments paid by the City of \$2,005,477 minus the trust reimbursements of \$2,553,422.

The benefit payments during the measurement period were determined as follows:

a. Retiree claims and premiums paid by employer (Medical, Rx, and Dental)	\$ 2,680,091
b. Admin fees for retirees	70,418
c. Stop-loss premiums for retirees	54,976
d. Special services	59,273
e. Salaries and benefits	-
f. Retiree life insurance costs	70,234
g. Retiree contributions (Medical, Rx, and Dental)	(929,515)
h. Stop-loss reimbursements for retiree claims	-
Total	<u>\$ 2,005,477</u>

## Recognition of Deferred Outflows and Deferred 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.

The expected remaining service lives of all active employees in the plan was approximately 7,784 years. Additionally, the total plan membership (active employees and inactive employees) was 1,250. 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 6.2268 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.

The impact of plan changes is immediately recognized in the current period's OPEB expense.

### Statement of Outflows and Inflows Arising from Current Reporting Period

	Recognition Period (or amortization years)	Total (Inflow) or Outflow	2019 Recognized in current OPEB expense	Deferred (Inflow) or Outflow in future expense
<b><u>Due to Liabilities:</u></b>				
Differences in expected and actual experience	6.2268	\$ (736,059)	\$ (118,208)	\$ (617,851)
Assumption changes	6.2268	\$ 0	\$ 0	\$ 0
<b><u>Due to Assets:</u></b>				
Excess Investment Returns	5.0000	\$ 1,251,173	\$ 250,235	\$ 1,000,938
<b>Total</b>		<b>\$ 515,114</b>	<b>\$ 132,027</b>	<b>\$ 383,087</b>

This table is provided to document sources of the new deferred inflows and outflows resulting from the current reporting year. The table is not a required disclosure. The required disclosures regarding deferred inflows and outflows of resources related to OPEB are shown on page C-4.



## Schedule of OPEB Expense under GASB Statement No. 75

### Fiscal Year Ending September 30, 2019

1. Service Cost	\$	656,975
2. Interest on the Total OPEB Liability		2,317,569
3. Current-Period Benefit Changes		0
4. Employee Contributions (made negative for addition here)		0
5. Projected Earnings on Plan Investments (made negative for addition here)		(711,217)
6. OPEB Plan Administrative Expense		29,550
7. Other Changes in Plan Fiduciary Net Position		0
8. Recognition of Current Year Outflow/(Inflow) due to Liabilities		(118,208)
9. Recognition of Current Year Outflow/(Inflow) due to Assets		250,235
10. Amortization of Prior Year Outflow/(Inflow) due to Liabilities		0
11. Amortization of Prior Year Outflow/(Inflow) due to Assets		(102,476)
<b>12. Total OPEB Expense</b>	<b>\$</b>	<b>2,322,428</b>

## Balances of Deferred Outflows and Deferred Inflows of Resources Related to OPEB

	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference between expected and actual experience, liability	\$ 0	\$ 617,851
Changes in assumptions	0	0
Difference between expected and actual experience, assets	693,511	0
Contributions subsequent to the measurement date	(423,304)	
<b>Total</b>	<b>\$ 270,207</b>	<b>\$ 617,851</b>

Employer contributions made subsequent to the measurement date of the total OPEB liability (December 31, 2018) and prior to the end of the employer's reporting period (September 30, 2019) should be reported by the employer as a deferred outflow related to OPEB. See paragraph 44 of GASB Statement No. 75 for single/agent employers that have formal assets.

The deferred outflow related to contributions made subsequent to the measurement date was determined using the same methodology used to determine the contributions made during the measurement period (see page B-2).

## Deferred Outflows and Inflows to be Recognized in Future OPEB Expense

Year Ending December 31	Net Deferred Outflows (Inflows)
2019	\$ 29,551
2020	29,551
2021	29,552
2022	132,025
2023	(118,208)
Thereafter	(26,811)
<b>Total</b>	<b>\$ 75,660</b>

## Deferred Outflows and Inflows – Amortization Schedule

	Remaining Recognition Period	Outflow/(Inflow) at beginning of Fiscal Year (or created in current year)	Fiscal Year Ending							Outflow/(Inflow) at end of Fiscal Year
			2019	2020	2021	2022	2023	2024	Thereafter	
<b>Differences in Liability Experience</b>										
2019	6.2268	(736,059)	(118,208)	(118,208)	(118,208)	(118,208)	(118,208)	(118,208)	(26,811)	(617,851)
2018	5.2268	0	0	0	0	0	0	0	0	0
Total			\$ (118,208)	\$ (118,208)	\$ (118,208)	\$ (118,208)	\$ (118,208)	\$ (118,208)	\$ (26,811)	\$ (617,851)
<b>Assumption Changes</b>										
2019	6.2268	0	0	0	0	0	0	0	0	0
2018	5.2268	0	0	0	0	0	0	0	0	0
Total			\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
<b>Investment Experience</b>										
2019	5.0000	1,251,173	250,235	250,235	250,235	250,235	250,233	0	0	1,000,938
2018	4.0000	(409,903)	(102,476)	(102,476)	(102,476)	(102,475)	0	0	0	(307,427)
Total			\$ 147,759	\$ 147,759	\$ 147,759	\$ 147,760	\$ 250,233	\$ 0	\$ 0	\$ 693,511
<b>Total Recognized in Future Expense</b>				\$ 29,551	\$ 29,551	\$ 29,552	\$ 132,025	\$ (118,208)	\$ (26,811)	\$ 75,660

This table is provided to document sources of the outstanding deferred inflows and outflows from year to year. The table is not a required disclosure. The required disclosures regarding deferred inflows and outflows of resources related to OPEB are shown on the previous page.

# Actuarial Assumptions and Methods

**Valuation Date:** December 31, 2017

## Methods and Assumptions:

Actuarial Cost Method Individual Entry-Age Normal

Discount Rate 6.50% as of December 31, 2018

Inflation 2.50%

Salary Increases **TMRS:** 3.50% to 10.50%, including inflation  
**Fire:** 3.50% to 9.71%, including inflation

Demographic Assumptions **TMRS:** Based on the experience study covering the four-year period ending December 31, 2014 as conducted for the Texas Municipal Retirement System  
**Fire:** Based on the pension valuation report for the Tyler Firefighters' Relief and Retirement Fund as of December 31, 2017

Mortality **TMRS:** For healthy retirees, the gender-distinct RP-2000 Combined Healthy Mortality Tables with Blue Collar Adjustment are used with male rates multiplied by 109% and female rates multiplied by 103%. The rates are projected on a fully generational basis by scale BB to account for future mortality improvements.  
**Fire:** The gender-distinct RP-2000 Combined Healthy Mortality Tables projected to 2024 using Scale AA.

Healthcare Cost Trend Rates Initial rate of 7.50% declining to ultimate rate of 4.35% after 15 years;  
Ultimate trend rate includes a 0.10% adjustment for the excise tax

Participation Rates It was assumed that 85% of future retirees who were hired before 1/1/1997 and 30% of future retirees who were hired after 1/1/1997 would choose to receive retiree health care benefits through the City.

## Other Information:

Notes There were no assumption changes during the year.

## 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 6.50%; the municipal bond rate is 3.71% (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 6.50%.

The City is expected to consistently fund the actuarially determined employer contribution, which uses a closed amortization period. As a result, the plan’s fiduciary net position is expected to be sufficient to pay all future benefits.

## Summary of Membership Information

The following table provides a summary of the number of participants in the plan as of December 31, 2017:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	443
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	0
Active Plan Members	<u>807</u>
Total Plan Members	1,250

Note: Membership information should be disclosed as of the measurement date (December 31, 2018). Because valuations are performed biennially, GRS does not have the membership counts as of the measurement date. It is the responsibility of the plan sponsor to disclose the membership counts as of December 31, 2018.

## Rollforward Disclosure

The actuarial valuation was performed as of December 31, 2017. Update procedures were used to roll forward the total OPEB liability to December 31, 2018.

## Sample Disclosures and Required Supplementary Information (RSI)

Illustration 1 in Appendix C of GASB Statement No. 75 provides sample note disclosures and required supplementary information (RSI) for a single employer plan that is administered through a formal trust.

## Sensitivity of Net OPEB Liability to the Single Discount Rate Assumption

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 6.50%, 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:

<b>1% Decrease</b>	<b>Current Single Discount Rate Assumption</b>	<b>1% Increase</b>
<b>5.50%</b>	<b>6.50%</b>	<b>7.50%</b>
\$ 28,553,255	\$ 25,737,735	\$ 23,212,919

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

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:

<b>1% Decrease</b>	<b>Current Healthcare Cost Trend Rate Assumption</b>	<b>1% Increase</b>
\$ 23,182,684	\$ 25,737,735	\$ 28,644,149

## SECTION D

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### REQUIRED SUPPLEMENTARY INFORMATION

# Schedule of Changes in Net OPEB Liability and Related Ratios

(Multi-year schedules may be built prospectively)

Fiscal year ending September 30,	2019	2018
<b>Total OPEB liability</b>		
Service cost	\$ 656,975	\$ 617,273
Interest on the total OPEB liability	2,317,569	2,303,993
Changes of benefit terms	0	0
Difference between expected and actual experience	(736,059)	0
Changes of assumptions	0	0
Benefit payments	(2,005,477)	(3,459,056)
<b>Net change in total OPEB liability</b>	<b>233,008</b>	<b>(537,790)</b>
<b>Total OPEB liability - beginning</b>	<b>36,329,155</b>	<b>36,866,945</b>
<b>Total OPEB liability - ending (a)</b>	<b>\$ 36,562,163</b>	<b>\$ 36,329,155</b>
<b>Plan fiduciary net position</b>		
Employer contributions	\$ 2,880,184	\$ 6,125,793
OPEB plan net investment income	(539,956)	1,042,478
Benefit payments	(2,005,477)	(3,459,056)
OPEB plan administrative expense	(29,550)	(23,966)
Other	0	0
<b>Net change in plan fiduciary net position</b>	<b>305,201</b>	<b>3,685,249</b>
<b>Plan fiduciary net position - beginning</b>	<b>10,519,227</b>	<b>6,833,978</b>
<b>Plan fiduciary net position - ending (b)</b>	<b>\$ 10,824,428</b>	<b>\$ 10,519,227</b>
<b>Net OPEB liability - ending (a) - (b)</b>	<b>\$ 25,737,735</b>	<b>\$ 25,809,928</b>
<b>Plan fiduciary net position as a percentage of total OPEB liability</b>	<b>29.61 %</b>	<b>28.96 %</b>
<b>Covered-employee payroll</b>	<b>\$ 45,363,280</b>	<b>\$ 45,211,468</b>
<b>Net OPEB liability as a percentage of covered-employee payroll</b>	<b>56.74 %</b>	<b>57.09 %</b>

**Notes to Schedule:**

N/A



## Schedule of Contributions Multiyear Last 10 Fiscal Years (which may be built prospectively)

FY Ending September 30,	Actuarially Determined Contribution	Actual Contribution	Contribution Deficiency (Excess)	Covered Payroll	Actual Contribution as a % of Covered Payroll
2018	\$ 2,988,214	\$ 3,226,151	\$ (237,937)	\$ 44,647,862	7.23 %
2019	2,988,214	3,129,268	(141,054)	48,416,755	6.46 %

Employer contributions of \$3,129,268 include trust contributions of \$3,428,129 plus the benefit payments paid by the City of \$1,899,375 minus the trust reimbursements of \$2,198,237. The benefit payments were determined in a manner similar to how the benefit payments for the measurement period were developed (see page C-1).

### Notes to Schedule of Contributions

<b>Valuation Date:</b>	The actuarially determined contribution for fiscal year ending September 30, 2019 was developed in the December 31, 2015 valuation.
<b>Methods and Assumptions:</b>	
Actuarial Cost Method	Individual Entry-Age Normal
Amortization Method	Level Dollar
Amortization Period	Closed, 23 years as of FYE19
Asset Valuation	Market Value
Investment Rate of Return	6.50%, net of investment expenses, including inflation
Inflation	2.50%
Salary Increases	<b>TMRS:</b> 3.50% to 10.50%, including inflation <b>Fire:</b> 3.50% to 9.71%, including inflation
Demographic Assumptions	<b>TMRS:</b> Based on the experience study covering the four-year period ending December 31, 2014 as conducted for the Texas Municipal Retirement System <b>Fire:</b> Based on the pension valuation report for the Tyler Firefighters' Relief and Retirement Fund as of December 31, 2015
Mortality	<b>TMRS:</b> For healthy retirees, the gender-distinct RP-2000 Combined Healthy Mortality Tables with Blue Collar Adjustment are used with male rates multiplied by 109% and female rates multiplied by 103%. The rates are projected on a fully generational basis by scale BB to account for future mortality improvements. <b>Fire:</b> The gender-distinct RP-2000 Combined Healthy Mortality Tables projected to 2024 using Scale AA.
Healthcare Cost Trend Rates	Initial rate of 6.50% declining to ultimate rate of 4.25% after 15 years
Participation Rates	It was assumed that 85% of future retirees who were hired before 1/1/1997 and 25% of future retirees who were hired after 1/1/1997 would choose to receive retiree health care benefits through the City.

# SECTION E

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## GLOSSARY OF TERMS

# Glossary of Terms

<b>Accrued Service</b>	Service credited under the system that was rendered before the date of the actuarial valuation.
<b>Actuarial Accrued Liability (AAL)</b>	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."
<b>Actuarial Assumptions</b>	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.
<b>Actuarial Cost Method</b>	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.
<b>Actuarial Equivalent</b>	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.
<b>Actuarial Gain (Loss)</b>	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.
<b>Actuarial Present Value (APV)</b>	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.
<b>Actuarial Valuation</b>	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.
<b>Actuarial Valuation Date</b>	The date as of which an actuarial valuation is performed.

# Glossary of Terms

<b>Actuarially Determined Contribution (ADC) or Annual Required Contribution (ARC)</b>	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.
<b>Amortization Method</b>	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).
<b>Amortization Payment</b>	The amortization payment is the periodic payment required to pay off an interest-discounted amount with payments of interest and principal.
<b>Cost-of-Living Adjustments</b>	Postemployment benefit changes intended to adjust benefit payments for the effects of inflation.
<b>Cost-Sharing Multiple-Employer Defined Benefit OPEB Plan (cost-sharing OPEB plan)</b>	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.
<b>Covered-Employee Payroll</b>	The payroll of employees that are provided with benefits through the OPEB plan.
<b>Deferred Inflows and Outflows</b>	The deferred inflows and outflows of OPEB resources are amounts used under GASB Statement No. 75 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.
<b>Discount Rate</b>	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"><li>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; and</li><li>2. The present value of the benefit payments not in (1) above, discounted using the municipal bond rate.</li></ol>

## 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

<b>Normal Cost</b>	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.
<b>Other Postemployment Benefits (OPEB)</b>	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.
<b>Real Rate of Return</b>	The real rate of return is the rate of return on an investment after adjustment to eliminate inflation.
<b>Service Cost</b>	The service cost is the portion of the actuarial present value of projected benefit payments that is attributed to a valuation year.
<b>Total OPEB Expense</b>	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"><li>1. Service Cost</li><li>2. Interest on the Total OPEB Liability</li><li>3. Current-Period Benefit Changes</li><li>4. Employee Contributions (made negative for addition here)</li><li>5. Projected Earnings on Plan Investments (made negative for addition here)</li><li>6. OPEB Plan Administrative Expense</li><li>7. Other Changes in Plan Fiduciary Net Position</li><li>8. Recognition of Outflow (Inflow) of Resources due to Liabilities</li><li>9. Recognition of Outflow (Inflow) of Resources due to Assets</li></ol>
<b>Total OPEB Liability (TOL)</b>	The TOL is the portion of the actuarial present value of projected benefit payments that is attributed to past periods of member service.
<b>Unfunded Actuarial Accrued Liability (UAAL)</b>	The UAAL is the difference between actuarial accrued liability and valuation assets.
<b>Valuation Assets</b>	The valuation assets are the assets used in determining the unfunded liability of the plan. For purposes of GASB Statements No. 74 and No. 75, the valuation assets are equal to the market value of assets.