



January 17, 2020

Mr. Brian Jay Ravins
Finance Director
Finance Department
P.O. Box 4748
Clearwater, FL 33758-4748

**Re: GASB Statement No. 75: Other Post-Employment Benefits (OPEB)
Actuarial Roll-forward for Fiscal Year Ending September 30, 2019**

Dear Mr. Ravins:

Gabriel, Roeder, Smith & Company (GRS) has been engaged by the City of Clearwater, Florida (the City) to perform an Actuarial Roll-forward of its Other Post-Employment Benefits (OPEB) provided to the City's retiring employees. We are pleased to present the results herein.

This report provides information on behalf of the City in connection with the Governmental Accounting Standards Board (GASB) Statement No. 75 "Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions." This information is intended to assist in preparation of the financial statements of the City. Financial statements are the responsibility of management, subject to the auditor's review. Please let us know if the auditor recommends any changes.

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

Our actuarial calculations for this report were prepared for the purpose of complying with the requirements of GASB Statement No. 75. These calculations have been made on a basis that is consistent with our understanding of this Statement.

The actuarial valuation of the liabilities was determined as of January 1, 2018 (based on the actuarial valuation results as reported in the January 1, 2018 actuarial valuation report dated December 19, 2018) and "rolled-forward" to the September 30, 2019 measurement date. These liabilities are used for GASB Statement No. 75 reporting for the reporting period ending September

30, 2019. If significant changes occur during the year, such as benefit changes or changes in assumptions or methods, these should be noted in the footnotes.

This report is based upon information furnished to us by the City for the January 1, 2018 actuarial valuation. This information was checked for internal consistency, but it was not audited. We are not responsible for the accuracy or completeness of the information provided by the City.

This report complements the January 1, 2018 actuarial valuation report dated December 19, 2018, 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 and morbidity assumptions, and benefit provisions.

The calculations are based upon assumptions regarding future events, which may or may not materialize. They are also based upon plan provisions outlined in this report. If you have reason to believe that the assumptions that were used are unreasonable, that the plan provisions are incorrectly described, that important relevant plan provisions are not described, or that conditions have changed since the calculations were made, you should contact the author of this report prior to relying on information in the report.

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 scope of this report does not include an analysis of the potential range of such future measurements.

This report has been prepared by actuaries who have substantial experience valuing public post-employment benefit programs. To the best of our knowledge, the information contained in this report is accurate and fairly represents the actuarial position of the plan 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. 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.

Nicolas Lahaye and Piotr Krekora 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. The signing actuaries are independent of the plan sponsor.

We will be pleased to answer any questions pertaining to this report.



Mr. Brian Jay Ravins

January 17, 2020

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Respectfully submitted,

GABRIEL, ROEDER, SMITH & COMPANY



Nicolas Lahaye, FSA, EA, MAAA, FCA
Consultant & Actuary



Piotr Krekora, ASA, EA, MAAA, FCA
Consultant & Actuary

Executive Summary

	2019
Actuarial Valuation Date	January 1, 2018
Measurement Date of the Total OPEB Liability	September 30, 2019
Employer's Fiscal Year Ending Date (Reporting Date)	September 30, 2019

Membership as of the Valuation Date

Number of	
- Retirees and Beneficiaries	631
- Inactive, Nonretired Members	75
- Active Members	1,517
- Total	2,223
Covered-Employee Payroll	\$ 95,520,530

Total OPEB Liability

Total OPEB Liability	\$ 32,910,842
Total OPEB Liability as a Percentage of Covered-Employee Payroll	34.45 %

Development of the Single Discount Rate

Long-Term Municipal Bond Rate*	2.75 %
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Total OPEB Expense

\$ 3,244,859

Summary of Deferred Outflows and Deferred Inflows of Resources by Source

	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference between expected and actual experience	\$ 0	\$ 0
Changes in assumptions and other inputs	3,360,170	697,285
Total	\$ 3,360,170	\$ 697,285

*Source: "Fidelity General Obligation AA Index" rate as of September 30, 2019, the most recent date available on or before the measurement date. This is the rate for Fixed Income Market Yield Curve for Municipal bonds with 20 years to maturity that include only federally tax-exempt municipal bonds as reported in Fidelity's "20-Year Municipal GO AA Index." 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.



Schedule of Changes in Total OPEB Liability and Related Ratios

Measurement Year Ended September 30, 2019

(Ultimately 10 Years Will Be Displayed)

Measurement Year Ended September 30,	2019	2018
A. Total OPEB Liability		
1. Service cost	\$ 1,677,787	\$ 1,731,394
2. Interest on the Total OPEB Liability	1,086,906	974,551
3. Changes of benefit terms	0	0
4. Difference between expected and actual experience of the Total OPEB Liability	0	0
5. Changes in assumptions and other inputs	4,006,356	(1,029,325)
6. Benefit payments	(1,122,335)	(1,054,805)
7. Net change in Total OPEB Liability	\$ 5,648,714	\$ 621,815
8. Total OPEB Liability – Beginning	27,262,128	26,640,313
9. Total OPEB Liability – Ending	<u>\$ 32,910,842</u>	<u>\$ 27,262,128</u>
B. Covered-Employee Payroll	\$ 95,520,530	\$ 92,964,945
C. Total OPEB liability as a percentage of Covered-Employee Payroll	34.45%	29.33%

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

Valuation Date: January 1, 2018
Measurement Date: September 30, 2019

Roll Forward Procedures The Total OPEB Liability was rolled forward 21 months from the Valuation Date to the Measurement Date using standard actuarial techniques.

Methods and Assumptions Used to Determine Total OPEB Liability:

Actuarial Cost Method	Entry Age Normal
Inflation	2.50%
Discount Rate	2.75%
Salary Increases	Salary increase rates used in the January 1, 2018 actuarial valuation of the City's pension plan.
Retirement Age	Retirement rates used in the January 1, 2018 actuarial valuation of the City's pension plan.
Mortality	Mortality tables used for Regular and Special Risk Class members in the July 1, 2016 actuarial valuation of the Florida Retirement System. They are based on the results of a statewide experience study covering the period 2008 through 2013 and include generational projections.
Healthcare Cost Trend Rates	Based on the Getzen Model, with trend starting at 6.75% and gradually decreasing to an ultimate trend rate of 4.24% plus 0.52% increase for excise tax.
Aging factors	Based on the 2013 SOA Study "Health Care Costs - From Birth to Death".
Expenses	Administrative expenses are included in the per capita health costs.

Other Information:

Notes Changes in assumptions and other inputs include the change in the discount rate from 3.83% as of the beginning of the measurement period to 2.75% as of September 30, 2019. This change is reflected in the Schedule of Changes in Total OPEB Liability.

There were no benefit changes during the year.



Statement of OPEB Expense

Employer Fiscal Year Ended September 30, 2019

(Based on Measurement Year Ended September 30, 2019)

OPEB Expense

1. Service Cost	\$	1,677,787
2. Interest on the Total OPEB Liability		1,086,906
3. Current-Period Benefit Changes		0
4. OPEB Plan Administrative Expense		0
5. Recognition of Outflow/(Inflow) of Resources due to Liabilities		480,166
6. Total OPEB Expense	\$	3,244,859

Recognition of Deferred Outflows and Inflows of Resources

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

At the beginning of the current measurement period, the average of the expected remaining service lives for purposes of recognizing the applicable deferred outflows and inflows of resources established in the current measurement period is 6.2 years.

Statement of Outflows and Inflows Arising from Current Reporting Period Employer Fiscal Year Ended September 30, 2019 (Based on Measurement Year Ended September 30, 2019)

Outflows/(Inflows) of Resources due to Liabilities

1. Difference between expected and actual experience of the Total OPEB Liability (gains) or losses	\$ 0
2. Assumption Changes (gains) or losses	\$ 4,006,356
3. Recognition period for Liabilities: Average of the expected remaining service lives of all employees {in years}	6.2
4. Outflow/(Inflow) of Resources to be recognized in the current OPEB expense for the difference between expected and actual experience of the Total OPEB Liability (1 ÷ 3)	\$ 0
5. Outflow/(Inflow) of Resources to be recognized in the current OPEB expense for changes in assumptions and other inputs (2 ÷ 3)	\$ 646,186
6. Outflow/(Inflow) of Resources to be recognized in the current OPEB expense due to Liabilities (4 + 5)	<u>\$ 646,186</u>
7. Deferred Outflow/(Inflow) of Resources to be recognized in future OPEB expenses for the difference between expected and actual experience of the Total OPEB Liability (1 - 4)	\$ 0
8. Deferred Outflow/(Inflow) of Resources to be recognized in future OPEB expenses for changes in assumptions and other inputs (2 - 5)	\$ 3,360,170
9. Deferred Outflow/(Inflow) of Resources to be recognized in future OPEB expenses due to Liabilities (7 + 8)	<u>\$ 3,360,170</u>

Statement of Outflows and Inflows Arising from Current and Prior Reporting Periods Employer Fiscal Year Ended September 30, 2019 (Based on Measurement Year Ended September 30, 2019)

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

	Outflows of Resources	Inflows of Resources	Net Outflows of Resources
1. Differences between expected and actual experience	\$ 0	\$ 0	\$ 0
2. Changes in assumptions and other inputs	646,186	166,020	480,166
3. Total	\$ 646,186	\$ 166,020	\$ 480,166

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

	Deferred Outflows of Resources	Deferred Inflows of Resources	Net Deferred Outflows of Resources
1. Differences between expected and actual experience	\$ 0	\$ 0	\$ 0
2. Changes in assumptions and other inputs	3,360,170	697,285	2,662,885
3. Total	\$ 3,360,170	\$ 697,285	\$ 2,662,885

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

Year Ending September 30	Net Deferred Outflows of Resources
2020	\$ 480,166
2021	\$ 480,166
2022	\$ 480,166
2023	\$ 480,166
2024	\$ 612,981
Thereafter	\$ 129,240
Total	\$ 2,662,885

**Statement of Remaining Deferred Outflows and
Inflows of Resources
Employer Fiscal Year Ended September 30, 2019
(Based on Measurement Year Ended September 30, 2019)**

<u>Date Established</u>	<u>Source</u>	<u>Recognition Period (years)</u>	<u>Original Amount</u>	<u>Years Remaining</u>	<u>Amount Unrecognized Beg. of Period</u>	<u>Amount Recognized in Current Expense</u>	<u>Amount Deferred to Future Periods</u>
<u>Deferred Outflows of Resources</u>							
9/30/2019	Assumption Changes	6.2	\$ 4,006,356	6.2	\$ 4,006,356	\$ 646,186	\$ 3,360,170
		SUBTOTAL:	4,006,356		4,006,356	646,186	3,360,170
<u>Deferred Inflows of Resources</u>							
9/30/2018	Assumption Changes	6.2	\$ (1,029,325)	5.2	\$ (863,305)	\$ (166,020)	\$ (697,285)
		SUBTOTAL:	(1,029,325)		(863,305)	(166,020)	(697,285)
		GRAND TOTAL:	\$ 2,977,031		\$ 3,143,051	\$ 480,166	\$ 2,662,885



Discount Rate

For plans that do not have formal assets, the discount rate should equal the tax-exempt municipal bond rate based on an index of 20-year general obligation bonds with an average AA credit rating as of the measurement date. For the purpose of this actuarial roll-forward, the municipal bond rate is 2.75% (based on the daily rate of Fidelity's "20-Year Municipal GO AA Index" closest to but not later than the measurement date). The discount rate used as of the beginning of the measurement year was 3.83%.

Plan Assets

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

Summary of Membership Information

The following table provides a summary of the number of participants in the plan as of January 1, 2018 (the latest valuation date):

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	631
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	75
Active Plan Members	<u>1,517</u>
Total Plan Members	2,223

Sensitivity of Total OPEB Liability to the Discount Rate Assumption

Regarding the sensitivity of the total OPEB liability to changes in the discount rate, the following presents the plan's total OPEB liability, calculated using a discount rate of 2.75%, as well as what the plan's total OPEB liability would be if it were calculated using a discount rate that is one percent lower or one percent higher:

1% Decrease	Current Discount Rate Assumption	1% Increase
1.75%	2.75%	3.75%
\$ 36,972,607	\$ 32,910,842	\$ 29,378,893

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

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

1% Decrease	Current Healthcare Cost Trend Rate Assumption	1% Increase
\$ 28,551,815	\$ 32,910,842	\$ 38,186,515