



# **GASB 74/75 INTERIM ACTUARIAL VALUATION**

Fiscal Year Ending October 31, 2018

# **CITY OF EAST PROVIDENCE**

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**June 21, 2019**

**Malcolm Moore  
City of East Providence  
145 Taunton Ave.  
East Providence, RI 02914**

This report summarizes the interim GASB actuarial valuation for the City of East Providence 2017/18 fiscal year. To the best of our knowledge, the report presents a fair position of the funded status of the plan in accordance with GASB Statement No. 74 (Financial Reporting for Post-Employment Benefit Plans Other Than Pension Plans) and GASB Statement No. 75 (Accounting and Financial Reporting by Employers for Post-Employment Benefits Other Than Pensions).

The information presented herein is based on the actuarial assumptions and substantive plan provisions summarized in this report and participant information furnished to us by the Plan Sponsor. We have reviewed the employee census provided by the Plan Sponsor for reasonableness when compared to the prior information provided but have not audited the information at the source, and therefore do not accept responsibility for the accuracy or the completeness of the data on which the information is based. When relevant data may be missing, we may have made assumptions we feel are neutral or conservative to the purpose of the measurement. We are not aware of any significant issues with and have relied on the data provided.

The discount rate, other economic assumptions, and demographic assumptions have been selected by the Plan Sponsor with the concurrence of Nyhart. In our opinion, the actuarial assumptions are individually reasonable and in combination represent our estimate of anticipated experience of the Plan. All calculations have been made in accordance with generally accepted actuarial principles and practice.

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 (such as the end of an amortization period); and
- changes in plan provisions or applicable law.

We did not perform an analysis of the potential range of future measurements due to the limited scope of our engagement.

To our knowledge, there have been no significant events prior to the current year's measurement date or as of the date of this report that could materially affect the results contained herein.



Neither Nyhart nor any of its employees has any relationship with the plan or its sponsor that could impair or appear to impair the objectivity of this report. Our professional work is in full compliance with the American Academy of Actuaries "Code of Professional Conduct" Precept 7 regarding conflict of interest. The undersigned meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Should you have any questions please do not hesitate to contact us.

A handwritten signature in black ink that reads "Randy Gomez".

Randy Gomez, FSA, MAAA  
Consulting Actuary

A handwritten signature in black ink that reads "Brian Nichols".

Brian Nichols, EA, MAAA, FCA  
Valuation Actuary

# Executive Summary

City of East Providence Interim GASB 74/75 Valuation for Fiscal Year Ending October 31, 2018

## Summary of Results

Presented below is the summary of GASB 75 results for the fiscal year ending October 31, 2018 compared to the prior fiscal year as shown in the City's Notes to Financial Statement.

	As of October 31, 2018
<b>Total OPEB Liability</b>	\$ 44,217,599
<b>Actuarial Value of Assets</b>	\$ (17,232,670)
<b>Net OPEB Liability</b>	\$ 26,984,929
<b>Funded Ratio</b>	39.0%

	FY 2017/18
<b>OPEB Expense</b>	\$ 3,722,620
<b>Annual Employer Contributions</b>	\$ 4,445,961
<b>Actuarially Determined Contribution</b>	\$ 3,945,974

	As of October 31, 2018
<b>Discount Rate</b>	7.00%
<b>Expected Return on Assets</b>	7.00%

# GASB Disclosures

City of East Providence Interim GASB 74/75 Valuation for Fiscal Year Ending October 31, 2018

## Schedule of Changes in Net OPEB Liability and Related Ratios

OPEB Liability	FY 2017/18	FY 2016/17
<b>Total OPEB Liability</b>		
Total OPEB Liability - beginning of year	\$ 42,820,046	\$ 36,688,606
Service cost	1,639,332	1,598,797
Interest	3,000,593	2,598,530
Change of benefit terms	0	(2,890,110)
Changes in assumptions	0	1,734,512
Differences between expected and actual experience	0	5,460,910
Benefit payments	(3,242,372)	(2,371,199)
Net change in total OPEB liability	\$ 1,397,553	\$ 6,131,440
Total OPEB Liability - end of year	\$ 44,217,599	\$ 42,820,046
<b>Plan Fiduciary Net Position</b>		
Plan fiduciary net position - beginning of year	\$ 15,908,749	\$ 11,181,267
Contributions - employer	4,445,961	5,216,989
Contributions - active employees	0	0
Net investment income	157,530	1,911,235
Benefit payments	(3,242,372)	(2,371,199)
Trust administrative expenses	(37,198)	(29,543)
Net change in plan fiduciary net position	\$ 1,323,921	\$ 4,727,482
Plan fiduciary net position - end of year	\$ 17,232,670	\$ 15,908,749
<b>Net OPEB Liability - end of year</b>	<b>\$ 26,984,929</b>	<b>\$ 26,911,297</b>
Plan fiduciary net position as % of total OPEB liability	39.0%	37.2%
Covered employee payroll	\$ 24,357,724	\$ 23,591,016
Net OPEB liability as % of covered payroll	110.8%	114.1%

\* Covered employee payroll for 2017/18 is estimated by increasing 2016/17 covered employee payroll by 3.25%

# GASB Disclosures

City of East Providence Interim GASB 74/75 Valuation for Fiscal Year Ending October 31, 2018

## Schedule of Employer Contributions

The Actuarially Determined Contributions (ADC) shown below are based on the Annual Required Contribution (ARC) calculated in prior GASB 45 actuarial valuations as shown in the City's financial statements.

	FY 2017/18	FY 2016/17	FY 2015/16	FY 2014/15	FY 2013/14
Actuarially Determined Contribution (ADC)	\$ 3,945,974	\$ 4,100,391	\$ 3,645,401	\$ 3,645,401	\$ 4,330,882
Contributions in relation to the ADC	4,445,961	5,216,989	7,772,836	8,721,571	3,424,015
Contribution deficiency/(excess)	\$ (345,570)	\$ (1,116,598)	\$ (4,127,435)	\$ (5,076,170)	\$ 906,867
Covered employee payroll	\$ 24,357,724	\$ 23,591,016	\$ 22,427,960	\$ 22,427,960	\$ 20,204,098
Contribution as a % of covered payroll	18.3%	22.1%	34.7%	38.9%	16.9%
	FY 2012/13	FY 2011/12	FY 2010/11	FY 2009/10	FY 2008/09
Actuarially Determined Contribution (ADC)	\$ 4,330,882	\$ 5,547,669	\$ 5,547,669	\$ 5,138,868	\$ 4,906,416
Contributions in relation to the ADC	3,424,015	3,728,228	3,728,228	2,755,302	2,510,526
Contribution deficiency/(excess)	\$ 906,867	\$ 1,819,441	\$ 1,819,441	\$ 2,383,566	\$ 2,395,890
Covered employee payroll	\$ 20,204,098	\$ 22,886,101	\$ 22,886,101	N/A	N/A
Contribution as a % of covered payroll	16.9%	16.3%	16.3%	N/A	N/A

\*Covered employee payroll for 2017/18 is estimated by increasing 2016/17 covered employee payroll by 3.25%

# GASB Disclosures

City of East Providence Interim GASB 74/75 Valuation for Fiscal Year Ending October 31, 2018

## OPEB Expense

OPEB Expense		FY 2017/18
Discount Rate		
Beginning of year		7.00%
End of year		7.00%
Service cost	\$	1,639,332
Interest		3,000,593
Change of benefit terms		0
Projected earnings on OPEB plan investments		(1,153,746)
Reduction for contributions from active employees		0
OPEB plan administrative expenses		37,198
Current period recognition of deferred outflows / (inflows) of resources		
Differences between expected and actual experience	\$	0
Changes in assumptions		0
Net difference between projected and actual earnings on OPEB plan investments		199,243
Total current period recognition	\$	199,243
Total OPEB expense	\$	3,722,620



# GASB Disclosures

City of East Providence Interim GASB 74/75 Valuation for Fiscal Year Ending October 31, 2018

## Deferred Outflows / (Inflows) of Resources

Deferred Outflows / (Inflows) of Resources represents the following items that have not been recognized in the OPEB Expense:

1. Differences between expected and actual experience of the OPEB plan
2. Changes of assumptions
3. Differences between projected and actual earnings in OPEB plan investments (for funded plans only)

The initial amortization period for the first two items noted above is based on expected future service lives while the difference between the projected and actual earnings in OPEB plan investment is amortized over five years. All balances are amortized linearly on a principal only basis and new bases will be created annually for each of the items above.

Differences between expected and actual experience for FYE	Initial Balance	Initial Amortization Period	Annual Recognition	Unamortized Balance as of October 31, 2018
October 31, 2018	\$ 0	N/A	\$ 0	\$ 0

Changes in assumptions for FYE	Initial Balance	Initial Amortization Period	Annual Recognition	Unamortized Balance as of October 31, 2018
October 31, 2018	\$ 0	N/A	\$ 0	\$ 0

Net Difference between projected and actual earnings in OPEB plan investments for FYE	Initial Balance	Initial Amortization Period	Annual Recognition	Unamortized Balance as of October 31, 2018
October 31, 2018	\$ 996,216	5	\$ 199,243	\$ 796,973

# GASB Disclosures

City of East Providence Interim GASB 74/75 Valuation for Fiscal Year Ending October 31, 2018

## Deferred Outflows / (Inflows) of Resources (Continued)

As of fiscal year ending October 31, 2018	Deferred Outflows	Deferred Inflows
Differences between expected and actual experience	\$ 0	\$ 0
Changes in assumptions	0	0
Net difference between projected and actual earnings in OPEB plan investments	796,973	0
<b>Total</b>	<b>\$ 796,973</b>	<b>\$ 0</b>

## Annual Amortization of Deferred Outflows / (Inflows)

The balances as of October 31, 2018 of the deferred outflows / (inflows) of resources will be recognized in OPEB expense in the future fiscal years as noted below.

FYE	Balance
2019	\$ 199,243
2020	\$ 199,243
2021	\$ 199,243
2022	\$ 199,244
2023	\$ 0
Thereafter	\$ 0

# GASB Disclosures

## City of East Providence Interim GASB 74/75 Valuation for Fiscal Year Ending October 31, 2018

### Sensitivity Results

The following presents the net OPEB liability as of October 31, 2018, calculated using the discount rate assumed and what it would be using a 1% higher and 1% lower discount rate.

- The current discount rate is 7.00%.
- The 1% decrease in discount rate would be 6.00%.
- The 1% increase in discount rate would be 8.00%.

As of October 31, 2018	Net OPEB Liability
1% Decrease	\$ 30,372,531
Current Discount Rate	\$ 26,984,929
1% Increase	\$ 23,936,901

The following presents the net OPEB liability as of October 31, 2018, using the health care trend rates assumed and what it would be using 1% higher and 1% lower health care trend rates.

- The current health care trend rate starts at an initial rate of 8.50%, decreasing to an ultimate rate of 5.00%.
- The 1% decrease in health care trend rates would assume an initial rate of 7.50%, decreasing to an ultimate rate of 4.00%.
- The 1% increase in health care trend rates would assume an initial rate of 9.50%, decreasing to an ultimate rate of 6.00%.

As of October 31, 2018	Net OPEB Liability
1% Decrease	\$ 23,084,714
Current Trend Rates	\$ 26,984,929
1% Increase	\$ 31,456,831

# GASB Disclosures

City of East Providence Interim GASB 74/75 Valuation for Fiscal Year Ending October 31, 2018

## Asset Information

Asset Breakdown	FY 2016/17	FY 2017/18
<b>Assets</b>		
Cash and cash equivalents	\$ 0	\$ 0
Securities lending cash collateral	0	0
<b>Total cash</b>	<b>\$ 0</b>	<b>\$ 0</b>
<b>Receivables</b>		
Contributions	\$ 0	\$ 0
Accrued interest	0	0
<b>Total receivables</b>	<b>\$ 0</b>	<b>\$ 0</b>
<b>Investments</b>		
Fixed income	\$ 3,659,012	\$ 3,963,514
Equities	10,977,037	11,890,542
Mutual Funds	1,272,700	1,378,614
<b>Total investments</b>	<b>\$ 15,908,749</b>	<b>\$ 17,232,670</b>
<b>Total Assets</b>	<b>\$ 15,908,749</b>	<b>\$ 17,232,670</b>
<b>Liabilities</b>		
<b>Payables</b>		
Investment management fees	\$ 0	\$ 0
Securities lending expense	0	0
<b>Total liabilities</b>	<b>\$ 0</b>	<b>\$ 0</b>
<b>Net Position Restricted to OPEB</b>	<b>\$ 15,908,749</b>	<b>\$ 17,232,670</b>

\* Asset Breakdown is the expected make-up of the Trust based on the target asset allocation and does not represent actual figures

# GASB Disclosures

City of East Providence Interim GASB 74/75 Valuation for Fiscal Year Ending October 31, 2018

## Asset Information (Continued)

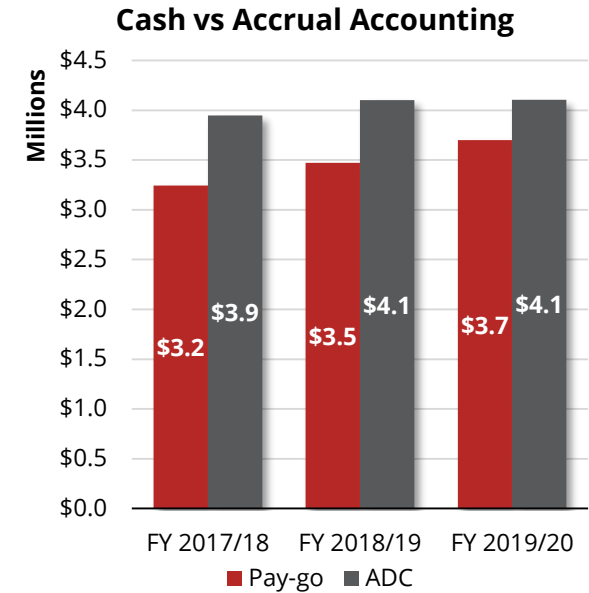
Asset Reconciliation	FY 2016/17	FY 2017/18
<b>Additions</b>		
Contributions Received		
Employer	\$ 5,216,989	\$ 4,445,961
Employee	0	0
<b>Total contributions</b>	<b>\$ 5,216,989</b>	<b>\$ 4,445,961</b>
Investment Income		
Net increase in fair value of investments	\$ 1,911,235	\$ 157,530
Interest and Dividends	0	0
Investment expense, other than from securities lending	0	0
Securities lending income	0	0
Securities lending expense	0	0
<b>Net investment income</b>	<b>\$ 1,911,235</b>	<b>\$ 157,530</b>
<b>Total additions</b>	<b>\$ 7,128,224</b>	<b>\$ 4,603,491</b>
<b>Deductions</b>		
Benefit payments	\$ 2,371,199	\$ 3,242,372
Administrative expenses	29,543	37,198
Other	0	0
<b>Total deductions</b>	<b>\$ 2,400,742</b>	<b>\$ 3,279,570</b>
<b>Net increase in net position</b>	<b>\$ 4,727,482</b>	<b>\$ 1,323,921</b>
<b>Net position restricted to OPEB</b>		
Beginning of year	\$ 11,181,267	\$ 15,908,749
End of year	\$ 15,908,749	\$ 17,232,670

\* Asset Breakdown is the expected make-up of the Trust based on the target asset allocation and does not represent actual figures

# Actuarially Determined Contributions

City of East Providence Interim GASB 74/75 Valuation for Fiscal Year Ending October 31, 2018

	FY 2017/18	FY 2018/19	FY 2019/20
Discount rate	7.00%	7.00%	7.00%
Payroll growth factor used for amortization	N/A	N/A	N/A
Actuarial cost method	Entry Age Normal Level % of Salary	Entry Age Normal Level % of Salary	Entry Age Normal Level % of Salary
Amortization type	Level Dollar	Level Dollar	Level Dollar
Amortization period (years)	29	28	27
Actuarial accrued liability (AAL) – beginning of year	\$ 42,820,046	\$ 44,217,599	\$ 45,599,874
Actuarial value of assets – beginning of year	(15,908,749)	(17,232,670)	(20,449,762)
Unfunded AAL – beginning of year	\$ 26,911,297	\$ 26,984,929	\$ 25,150,112
Normal Cost	\$ 1,639,332	\$ 1,754,085	\$ 1,876,871
Amortization of UAAL	2,048,494	2,077,888	1,960,903
Total normal cost plus amortization	\$ 3,687,826	\$ 3,831,973	\$ 3,837,774
Interest to the end of year	258,148	268,238	268,644
Actuarially Determined Contribution – Preliminary	\$ 3,945,974	\$ 4,100,211	\$ 4,106,418
Expected benefit payments	3,242,372	3,470,419	3,698,354
<b>Actuarially Determined Contribution – Final<sup>1</sup></b>	<b>\$ 3,945,974</b>	<b>\$ 4,100,211</b>	<b>\$ 4,106,418</b>



**Actuarially Determined Contribution (ADC)** is the target or recommended contribution to a defined benefit OPEB plan, which if paid on an ongoing basis, will provide sufficient resources to fund future costs for services to be earned and liabilities attributed to past services. This is typically higher than the pay-as-you-go cost because it includes recognition of employer costs expected to be paid in future accounting periods.

<sup>1</sup> Set to be the greater of the preliminary ADC and expected benefit payments.

# Discussion of Discount Rates

## City of East Providence Interim GASB 74/75 Valuation for Fiscal Year Ending October 31, 2018

Under GASB 74, the discount rate used in valuing OPEB liabilities for funded plans as of the Measurement Date must be based on the long-term expected rate of return on OPEB plan investments that are expected to be used to finance future benefit payments to the extent that (a) they are sufficient to pay for the projected benefit payments and (b) the OPEB plan assets are invested using a strategy that will achieve that return. When the OPEB plan investments are insufficient to cover future benefit payments, a yield for 20-year tax-exempt general obligation municipal bonds with an average rating of AA /Aa or higher (or equivalent quality on another rating scale) must be used.

For the current valuation:

1. The long-term expected rate of return on OPEB plan investment is assumed to be 7.0%. This was determined using a building block method in which expected future real rates of return (expected returns, net of OPEB plan investment expense and inflation) are developed for each major asset class. These expected future real rates of return are then combined to produce the long-term expected rate of return by weighting them based on the target asset allocation percentage and adding in expected inflation (1.9%). The best estimates of arithmetic real rates of return for each major asset class included in the OPEB Plan's target asset allocation as of June 30, 2017 are summarized in the following table.
2. The discount rate used when the OPEB plan investments are insufficient to pay for future benefit payments are selected from the range of indices as shown in the table below, where the range is given as the spread between the lowest and highest rate shown.

Asset Class	Target Allocation	L/T Expected Real ROR
U.S. Equity	48.3%	6.1%
Non-U.S. Equity	20.7%	6.7%
U.S. Aggregate Bonds	9.0%	1.7%
Intermediate-Term Credit	5.4%	2.3%
Short-Term Credit	3.6%	2.0%
Intermediate-Term TIPS	5.0%	0.8%
REITs	8.0%	4.9%
Total	100.0%	5.1%

Yield as of	November 1, 2017	October 31, 2018
Bond Buyer Go 20-Bond Municipal Bond Index	3.63%	4.30%
S&P Municipal Bond 20-Year High Grade Rate Index	3.35%	3.90%
Fidelity 20-Year Go Municipal Bond Index	3.49%	3.97%
Bond Index Range	3.35% - 3.63%	3.90% - 4.30%

3. The final equivalent single discount rate used for this year's valuation is 7.00% for accounting disclosure purposes based on the following assumptions:
  - a. The City is expected to deposit \$1.99 million pre-funding contributions annually to the Trust.
  - b. Pay-go costs will be fully paid by the City until at least FYE 2030.

Based on the above assumptions, the OPEB Trust is expected to have sufficient assets to cover all future benefit payments.

The same discount rate is also used for funding disclosure purposes (in calculating the Actuarially Determined Contribution).

# Summary of Key Actuarial Assumptions

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## City of East Providence Interim GASB 74/75 Valuation for Fiscal Year Ending October 31, 2018

For a complete summary of actuarial methods and assumptions, refer to the GASB 74 actuarial valuation report for the fiscal year ending October 31, 2017.

<b>Measurement Date</b>	For fiscal year ending October 31, 2018, October 31, 2018 measurement date was used.																					
<b>Actuarial Valuation Date</b>	November 1, 2017 with results actuarially projected on a “no gain / no loss” basis to get to the October 31, 2018 measurement date. Liabilities as of November 1, 2017 are based on an actuarial valuation date of November 1, 2017.																					
<b>Discount Rate</b>	7.00% as of November 1, 2017 and October 31, 2018 for accounting disclosure purposes 7.00% for funding disclosure purposes (in calculating the Actuarially Determined Contribution) Refer to the Discussion of Discount Rates section for more information on selection of the discount rate.																					
<b>Salary Scale</b>	Wage inflation plus merit/productivity increases assumed in the valuation are based on the MERS actuarial valuation as of June 30, 2017 for general employees and an experience study as of June 1, 2015 prepared by Fallon Pension Actuaries, Inc. for police and fire. Sample total salary increases are shown in the table below, including inflation. <table><thead><tr><th><b>YOS</b></th><th><b>Police / Fire</b></th><th><b>General</b></th></tr></thead><tbody><tr><td>0</td><td>4.00%</td><td>7.25%</td></tr><tr><td>5</td><td>10.00%</td><td>5.25%</td></tr><tr><td>10</td><td>4.94%</td><td>3.50%</td></tr><tr><td>15</td><td>4.94%</td><td>3.25%</td></tr><tr><td>20</td><td>4.93%</td><td>3.25%</td></tr><tr><td>21+</td><td>4.00%</td><td>3.25%</td></tr></tbody></table>	<b>YOS</b>	<b>Police / Fire</b>	<b>General</b>	0	4.00%	7.25%	5	10.00%	5.25%	10	4.94%	3.50%	15	4.94%	3.25%	20	4.93%	3.25%	21+	4.00%	3.25%
<b>YOS</b>	<b>Police / Fire</b>	<b>General</b>																				
0	4.00%	7.25%																				
5	10.00%	5.25%																				
10	4.94%	3.50%																				
15	4.94%	3.25%																				
20	4.93%	3.25%																				
21+	4.00%	3.25%																				
<b>Inflation Rate</b>	3.25% per year																					



# Summary of Key Actuarial Assumptions

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City of East Providence Interim GASB 74/75 Valuation for Fiscal Year Ending October 31, 2018

## Cost Method

Allocation of Actuarial Present Value of Future Benefits for services prior and after the Measurement Date was determined using Entry Age Normal Level % of Salary method where:

- Service Cost for each individual participant, payable from date of employment to date of retirement, is sufficient to pay for the participant's benefit at retirement; and
- Annual Service Cost is a constant percentage of the participant's salary that is assumed to increase according to the Payroll Growth.

## Health Care Trend Rates

FYE	Medical/Rx	FYE	Medical/Rx
2019	8.5%	2023	6.5%
2020	8.0%	2024	6.0%
2021	7.5%	2025	5.5%
2022	7.0%	2026+	5.0%

## Retiree Contributions

Retiree contributions are assumed to increase according to health care trend rates.

# Actuary's Notes

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## City of East Providence Interim GASB 74/75 Valuation for Fiscal Year Ending October 31, 2018

Interim year valuation results have been projected from the prior year's valuation without any adjustments.

### Medical Benefits

The monthly premiums by plan (excluding WRI cost) effective on July 1, 2017 are as shown below.

	Eff. 7/1/2017	
<b>Pre-65 Retiree Plan</b>	<b>Single</b>	<b>Family</b>
0019 Healthmate	\$ 624.61	\$ 1,539.12
0031 Healthmate	\$ 553.35	\$ 1,357.29
0005 Healthmate	\$ 654.38	\$ 1,612.56
0028 Blue Solutions HSA	\$ 479.64	\$ 1,181.89
0012 Classic	\$ 769.48	\$ 1,896.07
<b>Post-65 Retiree Plan</b>	<b>Single</b>	<b>Family</b>
Plan 65	\$ 184.08	\$ 368.16