



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

## **Fiscal Year Ending June 30, 2018**

# **TOWN OF WESTERLY POLICE**

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**January 2, 2019**

**Dyann Baker  
Town of Westerly Police  
23 Highland Avenue  
Westerly, RI 02891**

This report summarizes the interim GASB actuarial valuation for the Town of Westerly Police 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

A handwritten signature in black ink that reads "Emily Clauss".

Emily Clauss, ASA, MAAA  
Actuarial Analyst

# Executive Summary

Town of Westerly Police Interim GASB 74/75 Valuation for Fiscal Year Ending June 30, 2018

## Summary of Results

Presented below is the summary of GASB 75 results for the fiscal year ending June 30, 2018.

	As of June 30, 2018
<b>Total OPEB Liability</b>	\$ 26,904,189
<b>Actuarial Value of Assets</b>	\$ (4,189,632)
<b>Net OPEB Liability</b>	\$ 22,714,557
<b>Funded Ratio</b>	15.6%

	FY 2017/18
<b>OPEB Expense</b>	\$ 480,358
<b>Annual Employer Contributions</b>	\$ 1,912,794
<b>Actuarially Determined Contribution</b>	\$ 1,501,065

	As of June 30, 2018
<b>Discount Rate</b>	4.10%
<b>Expected Return on Assets</b>	7.00%

# GASB Disclosures

Town of Westerly Police Interim GASB 74/75 Valuation for Fiscal Year Ending June 30, 2018

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

OPEB Liability	FY 2017/18
<b>Total OPEB Liability</b>	
Total OPEB Liability - beginning of year	\$ 30,748,509
Service cost	341,151
Interest	1,106,276
Change of benefit terms	0
Changes in assumptions	(2,185,085)
Differences between expected and actual experience	(2,380,680)
Benefit payments	(725,982)
Net change in total OPEB liability	\$ (3,844,320)
Total OPEB Liability - end of year	\$ 26,904,189
<b>Plan Fiduciary Net Position</b>	
Plan fiduciary net position - beginning of year	\$ 2,800,049
Contributions - employer	1,912,794
Contributions - active employees	0
Net investment income	239,784
Benefit payments	(725,982)
Trust administrative expenses	(37,013)
Net change in plan fiduciary net position	\$ 1,389,583
Plan fiduciary net position - end of year	\$ 4,189,632
<b>Net OPEB Liability - end of year</b>	<b>\$ 22,714,557</b>
Plan fiduciary net position as % of total OPEB liability	15.6%
Covered employee payroll	\$ 3,778,768
Net OPEB liability as % of covered payroll	601.1%

\* FY 2017/18 covered payroll is based on FY 2016/17 payroll increased by the payroll growth assumption (3.0%).

# GASB Disclosures

## Town of Westerly Police Interim GASB 74/75 Valuation for Fiscal Year Ending June 30, 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 Town's financial statements.

	FY 2017/18	FY 2016/17	FY 2015/16	FY 2014/15	FY 2013/14
Actuarially Determined Contribution (ADC)	\$ 1,501,065	\$ 1,912,794	\$ 2,784,810	\$ 936,800	\$ 966,300
Contributions in relation to the ADC	1,912,794	400,000	386,000	429,600	429,600
Contribution deficiency/(excess)	\$ (411,729)	\$ 1,512,794	\$ 2,398,810	\$ 507,200	\$ 536,700
Covered employee payroll	\$ 3,778,768	\$ 3,668,707	\$ 3,406,417	\$ 3,307,201	\$ 3,384,654
Contribution as a % of covered payroll	50.6%	10.9%	11.3%	13.0%	12.7%

	FY 2012/13	FY 2011/12	FY 2010/11	FY 2009/10	FY 2008/09
Actuarially Determined Contribution (ADC)	\$ 922,800	\$ 907,530	\$ 464,700	\$ 459,200	\$ 433,200
Contributions in relation to the ADC	467,920	685,328	425,000	425,000	366,250
Contribution deficiency/(excess)	\$ 454,880	\$ 222,202	\$ 39,700	\$ 34,200	\$ 66,950
Covered employee payroll	\$ 3,039,511	\$ 2,847,036	\$ 2,838,895	\$ 2,854,292	\$ 2,976,831
Contribution as a % of covered payroll	15.4%	24.1%	15.0%	14.9%	12.3%

# GASB Disclosures

Town of Westerly Police Interim GASB 74/75 Valuation for Fiscal Year Ending June 30, 2018

## OPEB Expense

OPEB Expense		FY 2017/18
Discount Rate		
Beginning of year		3.60%
End of year		4.10%
Service cost	\$	341,151
Interest		1,106,276
Change of benefit terms		0
Projected earnings on OPEB plan investments		(243,955)
Reduction for contributions from active employees		0
OPEB plan administrative expenses		37,013
Current period recognition of deferred outflows / (inflows) of resources		
Differences between expected and actual experience	\$	(396,780)
Changes in assumptions		(364,181)
Net difference between projected and actual earnings on OPEB plan investments		834
Total current period recognition	\$	(760,127)
Total OPEB expense	\$	480,358

# GASB Disclosures

## Town of Westerly Police Interim GASB 74/75 Valuation for Fiscal Year Ending June 30, 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 June 30, 2018
June 30, 2018	\$ (2,380,680)	6	\$ (396,780)	\$ (1,983,900)

Changes in assumptions for FYE	Initial Balance	Initial Amortization Period	Annual Recognition	Unamortized Balance as of June 30, 2018
June 30, 2018	\$ (2,185,085)	6	\$ (364,181)	\$ (1,820,904)

Net Difference between projected and actual earnings in OPEB plan investments for FYE	Initial Balance	Initial Amortization Period	Annual Recognition	Unamortized Balance as of June 30, 2018
June 30, 2018	\$ 4,171	5	\$ 834	\$ 3,337

# GASB Disclosures

Town of Westerly Police Interim GASB 74/75 Valuation for Fiscal Year Ending June 30, 2018

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

As of fiscal year ending June 30, 2018	Deferred Outflows	Deferred Inflows
Differences between expected and actual experience	\$ 0	\$ (1,983,900)
Changes in assumptions	0	(1,820,904)
Net difference between projected and actual earnings in OPEB plan investments	3,337	0
<b>Total</b>	<b>\$ 3,337</b>	<b>\$ (3,804,804)</b>

## Annual Amortization of Deferred Outflows / (Inflows)

The balances of June 30, 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	\$ (760,127)
2020	\$ (760,127)
2021	\$ (760,127)
2022	\$ (760,126)
2023	\$ (760,960)
Thereafter	\$ 0

# GASB Disclosures

## Town of Westerly Police Interim GASB 74/75 Valuation for Fiscal Year Ending June 30, 2018

### Sensitivity Results

The following presents the net OPEB liability as of June 30, 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 4.10%.
- The 1% decrease in discount rate would be 3.10%.
- The 1% increase in discount rate would be 5.10%.

As of June 30, 2018	Net OPEB Liability
1% Decrease	\$ 27,370,920
Current Discount Rate	\$ 22,714,557
1% Increase	\$ 19,046,218

The following presents the net OPEB liability as of June 30, 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 June 30, 2018	Net OPEB Liability
1% Decrease	\$ 18,935,146
Current Trend Rates	\$ 22,714,557
1% Increase	\$ 27,461,099

# Asset Information

## Town of Westerly Police GASB 74/75 Valuation for Fiscal Year Ending June 30, 2018

Reconciliation of Assets (Fair Market Value Basis)	FY 2017/18 <sup>1</sup>
<b>Additions</b>	
Contributions received	
Employer	\$ 1,912,794
Employee	0
Total contributions	\$ 1,912,794
Investment income	
Net increase in fair value of investments	\$ 233,454
Accrued income	6,330
Investment expense, other than from securities lending	0
Securities lending income	0
Securities lending expense	0
Net investment income	\$ 239,784
Total additions	\$ 2,152,578
<b>Deductions</b>	
Benefit payments <sup>2</sup>	\$ 725,982
Administrative expenses	37,013
Other	0
Total deductions	\$ 762,995
<b>Net increase in net position</b>	\$ 1,389,583
<b>Net position restricted to OPEB</b>	
Beginning of year	2,800,049
End of year	\$ 4,189,632

<sup>1</sup> Includes both the OPEB Trust and the OPEB sub-account that is part of the Pension Trust.

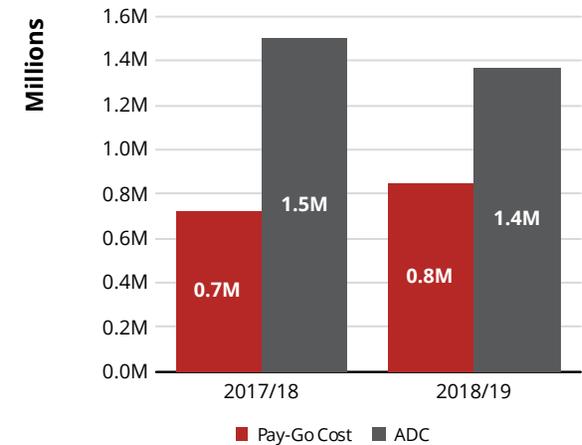
<sup>2</sup> Includes benefit payments of \$186,531 attributed to FY 2017/18 that were paid in the first quarter of FY 2018/19.

# Actuarially Determined Contributions

Town of Westerly Police Interim GASB 74/75 Valuation For Fiscal Year Ending June 30, 2018

	FY 2017/18		FY 2018/19	
Discount rate (Funding)	7.25%		7.00%	
Payroll growth factor used for amortization	N/A		N/A	
Actuarial cost method	Entry Age Normal Level % of Salary		Entry Age Normal Level % of Salary	
Amortization type	Level Dollar		Level Dollar	
Amortization period (years)	27		26	
Actuarial Accrued Liability (AAL) - beginning of year	\$	18,332,795	\$	18,139,313
Actuarial Value of Assets (AVA) - beginning of year		(2,831,124)		(4,180,514)
Unfunded AAL - beginning of year	\$	15,501,671	\$	13,958,799
Normal Cost	\$	165,170	\$	172,723
Amortization of Unfunded AAL		1,234,424		1,103,150
Total normal cost plus amortization	\$	1,399,594	\$	1,275,873
Interest to end of year		101,471		89,311
Actuarially Determined Contribution - Preliminary	\$	1,501,065	\$	1,365,184
Expected Benefit Payments		725,982		844,835
<b>Actuarially Determined Contribution - Final</b>	<b>\$</b>	<b>1,501,065</b>	<b>\$</b>	<b>1,365,184</b>

## Cash Vs Accrual Accounting



**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.

# Discussion of Discount Rates

## Town of Westerly Police Interim GASB 74/75 Valuation for Fiscal Year Ending June 30, 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 was 7.25% as of July 1, 2017 and 7.00% as of June 30, 2018. This was determined by the plan sponsor in conjunction with their asset advisors. Detailed evaluation of this assumption was outside of the scope of our engagement.
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.

Yield as of	July 1, 2017	June 30, 2018
Bond Buyer Go 20-Bond Municipal Bond Index	3.58%	3.87%
S&P Municipal Bond 20-Year High Grade Rate Index	3.13%	2.98%
Fidelity 20-Year Go Municipal Bond Index	3.56%	3.62%
Bond Index Range	3.13% - 3.58%	2.98% - 3.87%

3. The Town contributes discretionarily to the OPEB Trust annually and does not contribute the full Actuarially Determined Contribution (ADC). The final equivalent single discount rate used for accounting disclosure purposes is 3.60% as of July 1, 2017 and 4.10% as of June 30, 2018. The July 1, 2017 discount rate was based on the prior GASB 74/75 valuation for fiscal year ending June 30, 2017. The June 30, 2018 discount rate is based on the expectation that the Town will contribute \$725,000 annually in the future and continue paying for pay-go costs from the Trust.

# Summary of Key Actuarial Assumptions

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## Town of Westerly Police Interim GASB 74/75 Valuation for Fiscal Year Ending June 30, 2018

For a complete summary of actuarial methods and assumptions, refer to the GASB 74/75 actuarial valuation report for the fiscal year ending June 30, 2017.

### Measurement Date

For fiscal year ending June 30, 2018, June 30, 2018 measurement date was used.

### Actuarial Valuation Date

July 1, 2017 with results actuarially projected on a “no gain / no loss” basis to get to the June 30, 2018 measurement date. Liabilities as of July 1, 2017 are based on an actuarial valuation date of July 1, 2017.

### Discount Rate

3.60% as of July 1, 2017 and 4.10% as of June 30, 2018 for accounting disclosure purposes  
7.25% as of July 1, 2017 and 7.00% as of June 30, 2018 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.

### Payroll Growth

3.00% per year for general wage inflation plus merit / productivity increases as shown below.

YOS	Rates
0	12.00%
5	6.00%
10	2.25%
15	1.25%

### Inflation Rate

3.00% per year

### 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.

# Summary of Key Actuarial Assumptions

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Town of Westerly Police Interim GASB 74/75 Valuation for Fiscal Year Ending June 30, 2018

## Health Care Trend Rates

Annual trend rates by benefit are as shown below:

<b>FYE</b>	<b>Medical / Rx</b>	<b>Dental</b>	<b>Part B</b>
2019	8.50%	4.75%	5.00%
2020	8.00%	4.50%	5.00%
2021	7.50%	4.25%	5.00%
2022	7.00%	4.00%	5.00%
2023	6.50%	3.75%	5.00%
2024	6.00%	3.50%	5.00%
2025	5.50%	3.50%	5.00%
2026+	5.00%	3.50%	5.00%

## Retiree Contributions

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

# Actuary's Notes

## Town of Westerly Police Interim GASB 74/75 Valuation for Fiscal Year Ending June 30, 2018

Interim year valuation results have been projected from the prior year's valuation, with adjustments for actual premium and contribution increases from 2017/18 to 2018/19.

Additionally, we have updated the discount rate assumption for accounting and funding purposes. Refer to the Discussion of Discount Rates section for more information on selection of the discount rate. The accounting discount rate is 4.10% as of June 30, 2018 and 3.60% as of July 1, 2017. Making this change resulted in a reduction in liabilities.

### Premium Rates

Monthly premium rates effective on July 1, 2017 and 2018 by plan are as shown below.

Health Plans	Eff. 7/1/2017		Eff. 7/1/2018	
	EE	EE + Sp	EE	EE + Sp
<b>Pre-65 Medical/Rx</b>				
BCBS Plan (Pre-7/1/1993)	\$ 913.43	\$ 2,279.75	\$ 913.43	\$ 2,279.75
HDHP Plan (Post-7/1/1993)	\$ 626.33	\$ 1,562.21	\$ 626.33	\$ 1,562.21
<b>Post-65 Medical/Rx</b>				
	<b>Rate/person</b>	<b>Admin/person</b>	<b>Rate/person</b>	<b>Admin/person</b>
Plan 65 (post-65)	\$ 634.72	\$ 184.08	\$ 634.72	\$ 184.08
<b>Dental Plans</b>				
	<b>EE</b>	<b>EE + Sp</b>	<b>EE</b>	<b>EE + Sp</b>
Dental (Pre-7/1/1993)	\$ 37.96	\$ 128.54	\$ 37.96	\$ 128.54
Dental (Post-7/1/1993)	\$ 36.50	\$ 123.59	\$ 36.50	\$ 123.59

# Appendix

## Town of Westerly Police Interim GASB 74/75 Valuation for Fiscal Year Ending June 30, 2018

### Development of Actuarial Value of Assets (AVA)

		FY 2016/17		FY 2017/18
Fair Market Value (FMV) at beginning of year	\$	32,102,387	\$	35,402,010
Contributions		2,508,426		4,210,096
Benefit payments		(2,940,073)		(2,920,817)
Expected asset return		2,391,784		2,612,563
Expected FMV at end of year	\$	34,062,524	\$	39,303,852
FMV Gain/Loss		1,339,486		454,115
Actual FMV at end of year	\$	35,402,010	\$	39,757,967
Gain/Loss not recognized as of end of year		(392,878)		86,525
Actuarial Value of Assets (AVA) as of end of year <sup>1</sup>	\$	35,794,888	\$	39,671,442
(A) AVA as % of FMV		101.1%		99.8%
(B) FMV as of end of year	\$	2,800,049	\$	4,189,632
(C) AVA as of the end of year (A x B)	\$	2,831,124	\$	4,180,514

<sup>1</sup> Includes the total in both the Pension Trust and OPEB Trust.

# Appendix

## Town of Westerly Police Interim GASB 74/75 Valuation for Fiscal Year Ending June 30, 2018

### Recognition of Gain / (Loss) in Actuarial Value of Assets

FY 2016/17	Gain/Loss	Recognized as of July 1, 2016	Recognized in current year	Total recognized as of July 1, 2017	Not recognized as of July 1, 2017
Years	A	B	C = 20% x A	D = B + C	E = A - D
2012/13	\$ 438,415	\$ 350,732	\$ 87,683	\$ 436,415	\$ 0
2013/14	1,270,708	762,426	254,142	1,016,568	254,140
2014/15	(979,173)	(391,670)	(195,835)	(587,505)	(391,668)
2015/16	(2,211,565)	(442,313)	(442,313)	(884,626)	(1,326,939)
2016/17	1,339,486		267,897	267,897	1,071,589
<b>Total</b>			<b>\$ (28,426)</b>		<b>\$ (392,878)</b>

FY 2017/18	Gain/Loss	Recognized as of July 1, 2017	Recognized in current year	Total recognized as of July 1, 2018	Not recognized as of July 1, 2018
Years	A	B	C = 20% x A	D = B + C	E = A - D
2013/14	\$ 1,270,708	\$ 1,016,568	\$ 254,140	\$ 1,270,708	\$ 0
2014/15	(979,173)	(587,505)	(195,835)	(783,340)	(195,833)
2015/16	(2,211,565)	(884,626)	(442,313)	(1,326,939)	(884,626)
2016/17	1,339,486	267,897	267,897	535,794	803,692
2017/18	454,115		90,823	90,823	363,292
<b>Total</b>			<b>\$ (25,288)</b>		<b>\$ 86,525</b>