



# Town of Westerly Police Pension Fund

June 30, 2018  
GASB Nos. 67 & 68 Report

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This report is prepared in accordance with our understanding of GASB Nos. 67 & 68 for the purpose of disclosing pension plans in financial statements. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report.

The information presented in this report is based on:

- the actuarial assumptions included in this report;
- the plan provisions;
- participant information furnished to us by the Plan Administrator;
- asset information furnished to us by the Plan Trustee.

We have reviewed the provided data for reasonableness when compared to prior information provided, but have not audited the data. Where relevant data may be missing, we may have made assumptions we believe are reasonable for the purpose of the measurement. We are not aware of any significant issues with and have relied on the data provided. Any errors in the data provided may result in a different result than those provided in this report.

The interest rate, other economic assumptions, and demographic assumptions have been selected by the plan sponsor with our recommendations. The assumptions used, in our opinion, are reasonable and represent a reasonable expectation of future experience under the plan. All calculations have been made in accordance with generally accepted actuarial principles and practice.

A summary of any assumptions not included in this report, the plan provisions and the participant information is included in the Actuarial Valuation Report for funding purposes.

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 or additional cost or contribution requirements based on the plan's funded status); and
- changes in plan provisions or applicable law.

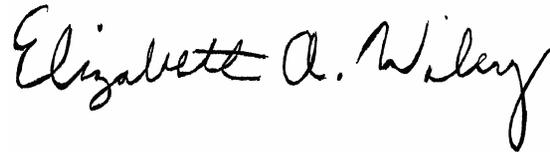
We did not perform an analysis of the potential range of future measurements due to the limited scope of our engagement.

The undersigned are compliant with the continuing education requirements of the Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States.

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 which could materially affect the results contained herein.

Neither Nyhart nor any of its employees have any relationships with the plan or plan sponsor which could impair or appear to impair the objectivity of this report.

Nyhart



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Elizabeth A. Wiley, ASA, EA



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Carter M. Angell, FSA, EA, MAAA

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12/31/2018

**Net Pension Liability**

The components of the net pension liability at June 30

	<b>06/30/2018</b>	<b>06/30/2017</b>
Total pension liability	\$ 49,881,156	\$ 46,752,164
Plan fiduciary net position	(35,568,335)	(32,601,961)
Net pension liability	\$ 14,312,821	\$ 14,150,203
Plan fiduciary net position as a percent of the total pension liability	71.31%	69.73%
Pension Expense for the Fiscal Year Ended June 30	\$ 1,894,501	\$ 2,036,901

**Actuarial Assumptions**

The total pension liability was determined using the following actuarial assumptions

Inflation	3.00%	3.00%
Salary increases, including inflation	Varies by Service	Varies by Service
Investment rate of return, including inflation, and net of investment expense	7.00%	7.25%

**Plan Membership**

The total pension liability was determined based on the plan membership as of July 1

	<b>2017</b>	<b>2015</b>
Inactive plan members and beneficiaries currently receiving benefits	48	46
Inactive plan members entitled to but not yet receiving benefits	1	1
Active plan members	48	49
Total members	97	96

**Town of Westerly Police Pension Fund**  
**GASB Nos. 67 & 68 Report as of Fiscal Year Ending June 30, 2018**  
**Statement of Fiduciary Net Position**

<b>Assets</b>	<b>06/30/2018</b>	<b>06/30/2017</b>
Cash and deposits	\$ 349,310	\$ 719,576
Securities lending cash collateral	0	0
Total cash	\$ 349,310	\$ 719,576
Receivables:		
Contributions	\$ 0	\$ 0
Due from broker for investments sold	0	0
Investment income	0	0
Other	0	0
Total receivables	\$ 0	\$ 0
Investments:		
Equity	\$ 23,596,936	\$ 21,871,713
Fixed Income	11,622,089	10,010,672
Real Estate	0	0
Total investments	\$ 35,219,025	\$ 31,882,385
Total assets	\$ 35,568,335	\$ 32,601,961
<b>Liabilities</b>		
Payables:		
Investment management fees	\$ 0	\$ 0
Due to broker for investments purchased	0	0
Collateral payable for securities lending	0	0
Other	0	0
Total liabilities	\$ 0	\$ 0
<b>Net position restricted for pensions</b>	<b>\$ 35,568,335</b>	<b>\$ 32,601,961</b>

**Town of Westerly Police Pension Fund**  
**GASB Nos. 67 & 68 Report as of Fiscal Year Ending June 30, 2018**  
**Statement of Changes in Fiduciary Net Position**

	06/30/2018	06/30/2017
<b>Additions</b>		
Contributions:		
Employer	\$ 1,850,000	\$ 1,720,000
Member	447,302	388,426
Nonemployer contributing entity	0	0
Total contributions	\$ 2,297,302	\$ 2,108,426
Investment income:		
Net increase in fair value of investments	\$ 2,924,994	\$ 3,537,554
Interest and dividends	0	0
Less investment expense, other than from securities lending	(61,087)	(55,310)
Net income other than from securities lending	\$ 2,863,907	\$ 3,482,244
Securities lending income	0	0
Less securities lending expense	0	0
Net income from securities lending	\$ 0	\$ 0
Net investment income	\$ 2,863,907	\$ 3,482,244
Other	0	0
Total additions	\$ 5,161,209	\$ 5,590,670
<b>Deductions</b>		
Benefit payments, including refunds of member contributions	\$ 2,194,835	\$ 2,248,159
Administrative expense	0	0
Other	0	0
Total deductions	\$ 2,194,835	\$ 2,248,159
<b>Net increase in net position</b>	\$ 2,966,374	\$ 3,342,511
<b>Net position restricted for pensions</b>		
Beginning of year	32,601,961	29,259,450
End of year	\$ 35,568,335	\$ 32,601,961

**Town of Westerly Police Pension Fund**  
**GASB Nos. 67 & 68 Report as of Fiscal Year Ending June 30, 2018**  
**Schedule of Changes in Net Pension Liability and Related Ratios**

	<u>06/30/2018</u>	<u>06/30/2017</u>	<u>06/30/2016</u>	<u>06/30/2015</u>
<b>Total pension liability</b>				
Service cost	\$ 904,511	\$ 974,655	\$ 917,082	\$ 851,843
Interest	3,375,546	3,320,232	3,224,788	3,036,062
Changes of benefit terms	0	0	0	0
Differences between expected and actual experience	(355,566)	(978,160)	47,387	(499,006)
Changes of assumptions	1,399,336	1,264,408	(835,428)	991,037
Benefit payments, including refunds of member contributions	(2,194,835)	(2,248,159)	(2,029,473)	(1,795,715)
Net change in total pension liability	<u>3,128,992</u>	<u>2,332,976</u>	<u>1,324,356</u>	<u>2,584,221</u>
Total pension liability - beginning	46,752,164	44,419,188	43,094,832	40,510,611
<b>Total pension liability - ending (a)</b>	<b>\$ 49,881,156</b>	<b>\$ 46,752,164</b>	<b>\$ 44,419,188</b>	<b>\$ 43,094,832</b>
<b>Plan fiduciary net position</b>				
Contributions - employer	\$ 1,850,000	\$ 1,720,000	\$ 1,713,800	\$ 1,716,400
Contributions - member	447,302	388,426	382,932	384,672
Contributions - nonemployer contributing member	0	0	0	0
Net investment income	2,863,907	3,482,244	129,896	1,255,952
Benefit payments, including refunds of member contributions	(2,194,835)	(2,248,159)	(2,029,473)	(1,795,715)
Administrative expenses	0	0	0	0
Other	0	0	0	0
Net change in plan fiduciary net position	<u>\$ 2,966,374</u>	<u>\$ 3,342,511</u>	<u>\$ 197,155</u>	<u>\$ 1,561,309</u>
Plan fiduciary net position - beginning	32,601,961	29,259,450	29,062,295	27,500,986
<b>Plan fiduciary net position - ending (b)</b>	<b>\$ 35,568,335</b>	<b>\$ 32,601,961</b>	<b>\$ 29,259,450</b>	<b>\$ 29,062,295</b>
<b>Net pension liability - ending (a) - (b)</b>	<b>\$ 14,312,821</b>	<b>\$ 14,150,203</b>	<b>\$ 15,159,738</b>	<b>\$ 14,032,537</b>
Plan fiduciary net position as a percentage of the total pension liability	71.31%	69.73%	65.87%	67.44%
Covered-employee payroll	\$ 3,665,217	\$ 4,077,370	\$ 4,077,370	\$ 3,802,837
Net pension liability as percentage of covered-employee payroll	390.50%	347.04%	371.80%	369.00%

**Town of Westerly Police Pension Fund**  
**GASB Nos. 67 & 68 Report as of Fiscal Year Ending June 30, 2018**  
**Pension Expense**

Fiscal year ending	<u>06/30/2018</u>	<u>06/30/2017</u>
Service cost	\$ 904,511	\$ 974,655
Interest on total pension liability	3,375,546	3,320,232
Projected earnings on pension plan investments	(2,367,357)	(2,189,219)
Changes of benefit terms	0	0
Employee contributions	(447,302)	(388,426)
Pension plan administrative expense	0	0
Other changes	0	0
Current period recognition of deferred outflows/(inflows) of resources		
Differences between Expected & Actual Experience in measurement of the Total Pension Liability	\$ (315,350)	\$ (244,237)
Changes of assumptions	528,335	248,468
Differences between Projected & Actual Earnings on Pension Plan Investments	216,118	315,428
<b>Total</b>	<u>\$ 1,894,501</u>	<u>\$ 2,036,901</u>

**Town of Westerly Police Pension Fund**  
**GASB Nos. 67 & 68 Report as of Fiscal Year Ending June 30, 2018**  
**Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions**

Differences between expected and actual experience in measurement of the total pension liability for fiscal year ending:	Initial Balance	Initial Amortization Period	Annual Recognition	06/30/2018 Balance
June 30, 2018	\$ (355,566)	5.0	\$ (71,113)	\$ (284,453)
June 30, 2017	\$ (978,160)	6.0	\$ (163,027)	\$ (652,106)
June 30, 2016	\$ 47,387	6.0	\$ 7,898	\$ 23,693
June 30, 2015	\$ (499,006)	5.6	\$ (89,108)	\$ (142,574)
			\$ (315,350)	\$ (1,055,440)

Changes in assumptions for fiscal year ending:	Initial Balance	Initial Amortization Period	Annual Recognition	06/30/2018 Balance
June 30, 2018	\$ 1,399,336	5.0	\$ 279,867	\$ 1,119,469
June 30, 2017	\$ 1,264,408	6.0	\$ 210,735	\$ 842,938
June 30, 2016	\$ (835,428)	6.0	\$ (139,238)	\$ (417,714)
June 30, 2015	\$ 991,037	5.6	\$ 176,971	\$ 283,153
			\$ 528,335	\$ 1,827,846

Differences between projected and actual earnings on pension plan investments for fiscal year ending:	Initial Balance	Initial Amortization Period	Annual Recognition	06/30/2018 Balance
June 30, 2018	\$ (496,550)	5.0	\$ (99,310)	\$ (397,240)
June 30, 2017	\$ (1,293,025)	5.0	\$ (258,605)	\$ (775,815)
June 30, 2016	\$ 2,052,298	5.0	\$ 410,460	\$ 820,918
June 30, 2015	\$ 817,865	5.0	\$ 163,573	\$ 163,573
			\$ 216,118	\$ (188,564)

**Town of Westerly Police Pension Fund**  
**GASB Nos. 67 & 68 Report as of Fiscal Year Ending June 30, 2018**  
**Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions**

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	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	\$ 23,693	\$ (1,079,133)
Changes of Assumptions	\$ 2,245,560	\$ (417,714)
Net difference between projected and actual earnings on pension plan investments	\$ 984,491	\$ (1,173,055)
	\$ 3,253,744	\$ (2,669,902)

The balances as of June 30, 2018 of the deferred outflows/(inflows) of resources will be recognized in pension expense for the fiscal year ending June 30.

2019	\$ 429,103
2020	\$ 230,381
2021	\$(232,794)
2022	\$ 157,152
2023	\$ 0
Thereafter	\$ 0

The long-term expected rate of return on pension plan investments was determined using a building-block method in which expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These expected future real rates of return are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for each major asset class included in the pension plan's target asset allocation as of June 30, 2018 are summarized in the following table:

<b>Asset class</b>	Target allocation	Long-term expected real rate of return
Equity	62.0%	7.15%
Fixed Income	34.0%	2.43%
Real Estate	3.0%	5.00%
Cash	1.0%	0.50%
Total	100.0%	

Long-term expected rate of return is 7.00%.

**Discount rate**

The discount rate used to measure the total pension liability was 7.00%. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rate and that contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rate. Professional judgment on future contributions has been applied in those cases where contribution patterns deviate from the actuarially determined rates. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

**Sensitivity of the net pension liability to changes in the discount rate**

The following presents the net pension liability, calculated using the discount rate of 7.00%, as well as what the net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (6.00%) or 1-percentage-point higher (8.00%) than the current rate:

	<u>1% Decrease (6.00%)</u>	<u>Current Discount Rate (7.00%)</u>	<u>1% Increase (8.00%)</u>
Net pension liability	\$ 21,282,432	\$ 14,312,821	\$ 8,655,229

**Town of Westerly Police Pension Fund**  
**GASB Nos. 67 & 68 Report as of Fiscal Year Ending June 30, 2018**  
**Schedule of Contributions**

	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>
Actuarially determined contribution	\$ 1,610,200	\$ 1,667,700	\$ 1,713,800	\$ 1,716,400	\$ 1,816,000
Contributions in relation to the actuarially determined contribution	1,850,000	1,720,000	1,713,800	1,716,400	1,816,000
<b>Contribution deficiency (excess)</b>	<b>\$ (239,800)</b>	<b>\$ (52,300)</b>	<b>\$ 0</b>	<b>\$ 0</b>	<b>\$ 0</b>
Covered-employee payroll	\$ 3,665,217	\$ 4,077,370	\$ 4,077,370	\$ 3,802,837	\$ 3,497,794
Contributions as a percentage of covered-employee payroll	50.47%	42.18%	42.03%	45.13%	51.92%
	<u>2013</u>	<u>2012</u>	<u>2011</u>	<u>2010</u>	<u>2009</u>
Actuarially determined contribution	\$ 1,272,700	\$ 1,225,170	\$ 1,161,510	\$ 1,164,310	\$ 954,660
Contributions in relation to the actuarially determined contribution	1,586,044	1,225,170	1,275,000	1,275,000	1,098,750
<b>Contribution deficiency (excess)</b>	<b>\$ (313,344)</b>	<b>\$ 0</b>	<b>\$ (113,490)</b>	<b>\$ (110,690)</b>	<b>\$ (144,090)</b>
Covered-employee payroll	\$ 3,039,511	\$ 2,847,036	\$ 2,838,895	\$ 2,854,292	\$ 2,624,354
Contributions as a percentage of covered-employee payroll	52.18%	43.03%	44.91%	44.67%	41.87%

The total pension liability as of June 30, 2018 was determined using the following actuarial assumptions:

<b>Actuarial Cost Method</b>	Entry Age Method
<b>Asset Valuation Method</b>	Fair market value of assets on the measurement date
<b>Interest Rates</b>	
Discount Rate	7.00%
Expected Long Term Rate of Return	7.00%
Municipal Bond Rate	N/A
	The interest rate assumptions were evaluated as part of the experience study dated August 17, 2018 and were set by the plan sponsor in conjunction with their asset advisors.
<b>Inflation</b>	3.00%
<b>Measurement Date</b>	June 30, 2018
<b>Participant Data</b>	Collected as of July 1, 2017, rolled forward and adjusted for material events to the measurement date.
<b>Cost of Living Increases</b>	Valued explicitly
<b>Mortality Rates</b>	
Healthy	RP 2014 Mortality Table with generational improvements from 2006 using scale MP-2017
Disabled	RP 2014 Disabled Mortality Table with generational improvements from 2006 using scale MP-2017
	As the plan is not large enough to have credible experience, mortality assumptions are set to reflect general population trends.
<b>All other assumptions</b>	As described in the assumptions section of the actuarially determined contribution

**Actuarial Cost Method**

Entry Age Method

**Asset Valuation Method**

Fair market value of assets on the measurement date adjusted for a five year phase-in of gains and losses of plan assets at 20% per year

**Amortization Method**

Closed 30-year level dollar amortization of the Unfunded Actuarial Accrued Liability

**Interest Rate**

7.25% net of investment expenses

This assumption was evaluated as part of the experience study dated August 17, 2018

**Inflation**

3.00%

This assumption was set by the plan sponsor in conjunction with their investment advisor.

**Annual Pay Increases**

<b>Service</b>	<b>Rate</b>
0	15.00%
1	14.00%
2	12.00%
3	11.00%
4	10.00%
5	9.00%
6	8.00%
7	7.00%
8	6.00%
9	5.50%
10	5.25%
11-12	5.00%
13	4.75%
14	4.50%
15	4.25%
16+	4.00%

The salary projection scale is based on a study of actual experience for the plan during July 1, 2007 through July 1, 2017 and is based on a combination of plan experience and the scales outlined in the collective bargaining agreement. See the experience study report August 17, 2018.

**Cost of Living Increases**

Valued explicitly

**Mortality Rates**

Healthy RP 2014 Mortality Table with generational improvements from 2006 using scale MP-2016

Disabled RP 2014 Disabled Mortality Table with generational improvements from 2006 using scale MP-2016

As the plan is not large enough to have credible experience, mortality assumptions are set to reflect general population trends.

**Disability Rates**

33% of the 1985 Pension Disability Table Class 4 rates for males and females

The assumed disability rates are based on a study of actual experience for the plan during July 1, 2007 - July 1, 2017 and are based on expectations from a combination of plan experience and current plan provisions. See the experience study dated August 17, 2018.

**Withdrawal Rates**

<b>Service</b>	<b>Rate</b>
0	7.00%
1	5.50%
2	5.00%
3	4.50%
4	4.00%
5	3.50%
6	3.00%
7	2.50%
8	2.25%
9	2.00%
10	1.75%
11	1.50%
12	1.25%
13	1.00%
14	0.75%
15	0.50%
16+	0.00%

The assumed withdrawal rates are based on a study of actual experience for the plan during July 1, 2007 - July 1, 2017 and are based on expectations from a combination of plan experience and current plan provisions. See the experience study dated August 17, 2018.

**Retirement Rates**

For those hired on or before July 1, 2010:

<b>Service</b>	<b>Rate</b>
20-22	30.00%
23	20.00%
24-27	30.00%
28	100.00%

For those hired after July 1, 2010:

<b>Service</b>	<b>Rate</b>
25-27	30.00%
28	20.00%
29	30.00%
30	40.00%
31	100.00%

The assumed retirement rates are based on a study of actual experience for the plan during July 1, 2007 - July 1, 2017 and are based on a combination of plan experience and expectation based on current plan provisions. See the experience study dated August 17, 2018.

**Marital Status and Ages**

70% of males and 60% of females assumed married with wives 3 years younger than husbands

**Payment Form**

67.5% Joint & Survivor annuity for married; Single Life annuity otherwise

**Expense and/or Contingency Loading**

Estimated annual administrative fees. As administrative expenses are not paid from the trust, no administrative expenses are assumed.

**Experience Study**

The most recent experience study covered experience over the period July 1, 2007 through June 30, 2017

**Participation**

All regular police officers are eligible to participate.

**Normal retirement benefit**

A pension for life computed as 50% of annual pay for 20 years of service plus 2% times annual pay for each year of service over 20 years up to 5 years plus 1% times annual pay for each year of service over 25 years (maximum service equals 30)

For those hired after July 1, 2010, a pension for life computed as 50% of annual pay for 25 years of service plus 3% times annual pay for each year of service over 25 years (maximum service equals 30)

**Normal retirement date**

Effective July 1, 1987, a policeman may retire upon completion of 20 years of service

Effective July 1, 2010, a policeman hired after July 1, 2010 may retire upon completion of 25 years of service

Effective July 1, 2013, a policeman hired after July 1, 2013 may retire upon completion of 25 years of service and attainment of age 52

**Annual pay**

Base salary for the 12 months immediately preceding retirement

**Credited service**

Period of employment as police officer of Town

**Normal form of payment**

67.5% Joint & Survivor annuity

**Vesting**

100% vested after 10 years of service. Participants with less than 10 years of service receive a return of employee contributions with interest.

**Non Occupational Disability retirement**

10% of final Annual Pay for participants with less than 10 years of service, 18% for 10 to 15 years of service, and 27% for 15 to 20 years of service

**Occupational Disability retirement**

50% of final Annual Pay

**Preretirement death benefit**

Return of member's contributions with interest.

**Postretirement death benefit**

Continuation of 67.5% of deceased retired member's pension to spouse until death or remarriage. If no eligible spouse, benefit payable to dependent children under age 18

**Death in line of duty benefit**

Heirs shall receive benefits the member would have been entitled to as though they had been members of the bargaining unit for 20 years

**Cost-of-living adjustment**

Retired prior to June 30, 1990	2.5% Simple, retroactive to July 1, 1993
Retired on or after June 30, 1990	2.5% Simple, effective July 1, 1994
Retired on or after July 1, 1998	3.0% Simple
Hired after July 1, 2010	3.0% Simple after earlier of 5 years of payment or attainment of age 52
Hired after July 1, 2013	2.0% Simple

**Member Contributions**

12.0% of pay