

**TOWN OF SCITUATE RETIREMENT PLAN  
FOR THE POLICE DEPARTMENT EMPLOYEES  
VALUATION AS OF APRIL 1, 2017**

**Prepared By:**

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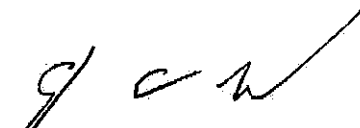
## I. INTRODUCTION

This report presents the results of the actuarial valuation as of April 1, 2017 of the Town of Scituate Retirement Plan for the Police Department Employees. The purpose of this report is to illustrate the current position of the plan and to present information which will assist the Town of Scituate in determining the contribution levels which are sufficient to meet accruing liabilities and to maintain the plan on a sound actuarial basis.

The major provisions of the plan upon which this valuation is based are outlined in Section III. The valuation reflects the terms of the Collective Bargaining Agreement which is effective from July 1, 2015 through June 30, 2018.

This valuation is based on a discount rate of 7.50%.

This valuation was prepared on the basis of information submitted to The Angell Pension Group, Inc. in the form of payroll and asset data, as well as ancillary material pertaining to the plan. We have not independently verified, nor do we make any representations as to, the accuracy of such information.

  
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Jeffrey C. Liter, Ph.D., E.A., M.A.A.A.  
Enrolled Actuary

August 28, 2017

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Date

## II. SUMMARY OF PLAN CONTRIBUTIONS

1.	Accrued Liability		
	a. Actives	\$3,746,033	
	b. Disabled Participants	\$2,136,741	
	c. Retirees	<u>\$9,018,533</u>	
	d. Total		\$14,901,307
2.	Plan Assets		\$5,288,504
3.	Unfunded Accrued Liability [(1d) - (2)]		\$9,612,803
4.	Normal Cost		
	a. Retirement	\$159,849	
	b. Death	\$2,553	
	c. Disability	<u>\$21,464</u>	
	d. Total		\$183,866
5.	20 Year Amortization of (3) (Payments assumed to increase by 3.5% per year)		\$672,876
6.	Interest on (4d) and (5) (Assumes Mid-Year Payment on October 1, 2017)		\$32,128
7.	20 Year Amortization Contribution payable October 1, 2017 [(4d) + (5) + (6)]		\$888,870*

\* Town of Scituate's portion of the contribution for the fiscal year beginning April 1, 2017 will be the \$888,870 reduced by the actual amount of employee contributions.

### III. SUMMARY OF PLAN PROVISIONS

- Eligibility Requirements:* All regular or permanent police of the Town of Scituate, Rhode Island, following completion of a six month waiting period. Only employees hired before July 1, 2014 are eligible to participate.
- Normal Retirement Date:* For participants hired prior to June 30, 2000, upon completion of 20 Years of Service, the participant is eligible for normal retirement. Alternatively, a participant may continue in service beyond 20 years. For participants hired on or after July 1, 2000, upon completion of 25 Years of Service the participant is eligible for normal retirement.
- A participant may retire upon the completion of ten years of service or the attainment of age 56, whichever is later.
- Compensation:* The monthly equivalent of a Participant's annual compensation, including longevity pay and holiday pay, but exclusive of bonuses, overtime and other forms of additional compensation, and exclusive of any program of deferred compensation, employee benefits or additional remuneration payable other than in cash.
- Average Compensation:* Compensation of a participant averaged over three (3) years as an employee prior to the earlier of (1) his termination of Service, (2) his retirement or (3) termination of the Plan.
- Normal Retirement Benefit:* For participants hired on or prior to June 30, 2000, a benefit equal to 2.5% of Average Compensation times the first 20 years of service, plus 2% of Average Compensation times years of service in excess of 20 years. Maximum benefit is 60% of Average Compensation. For participants hired on or after July 1, 2000, a benefit equal to 2.4% of Average Compensation times the first 25 years of service. Maximum benefit is 60% of Average Compensation.
- Normal Form of Benefit:* Life annuity for single participants and an unreduced 67.5% Joint and Survivor Annuity for married participants.
- Death Benefit for Actives not yet Eligible for Normal Retirement:* In the event of death of a member, while employed, benefits shall be according to the state law as to Police Pensions.

Upon death of a member due to occupational causes:

- (a) Total Employee Mandatory Contributions.
- (b) A payment of \$800 for each year of service up to \$16,000. Minimum Lump Sum: \$4,000
- (c) A spouse's benefit equal to 50% of Participant's Average Compensation for spouse's life or until she remarries, if earlier plus 10% of Participant's Average Compensation for each child until the child attains age 18; subject to an overall maximum of 66 $\frac{2}{3}$ % of Participant's Average Compensation.

Upon death of a member due to non-occupational causes:

- (a) Total Employee Mandatory Contributions.
- (b) A payment of \$800 for each year of service up to \$16,000. Minimum Lump Sum: \$4,000
- (c) A spouse's benefit equal to 30% of Participant's Average Compensation for spouse's life or until she remarries, if earlier plus 10% of Participant's Average Compensation for each child until the child attains age 18; subject to an overall maximum of 50% of Participant's Average Compensation.

*Death Benefit for Actives*

*Eligible for Normal Retirement:*

For active married participants, spouse shall receive a monthly benefit of 67.5% of the participant's accrued benefit payable for spouse's life or if earlier, until the spouse remarries. If there is no surviving spouse, each child of the Participant under the age of eighteen (18) shall share equally in the 67 $\frac{1}{2}$ % of the monthly retirement benefit until the last such child of the Participant shall have attained age eighteen (18). In addition, a payment of \$800 for each year of service up to \$16,000 (Minimum Lump Sum: \$4,000).

*Post-Retirement Death Benefit:*

For retired married participants, spouse shall receive a monthly benefit of 67.5% of the participant's accrued benefit payable for spouse's life or if earlier, until the spouse remarries. If there is no surviving spouse, each child of the Participant under the age of eighteen (18) shall share equally in the 67 $\frac{1}{2}$ % of the monthly benefit until the last such child has attained age eighteen (18). In addition, a payment of \$800 for each year of service up to \$16,000. The lump sum death benefit is reduced

by 25% for each year following retirement subject to a minimum benefit of \$4,000.

*Disability:*

Upon becoming disabled due to occupational causes, a benefit equal to 66⅔% of the participant's Average Compensation payable for the period of disability. Upon becoming disabled due to non-occupational causes after completing 7 years of service, a benefit equal to 1⅓% of the participant's Average Compensation for each year of credited service, but not less than 25% and not greater than 50%.

*Termination of Employment:*

With less than ten years of service, a refund of employee contributions. A member who terminates after ten years of service will be eligible to receive a pension commencing at age 56 equal to his or her accrued benefit.

*Funding:*

Effective July 1, 2015, the members of the Plan shall each contribute 12% of Compensation and the Town of Scituate shall contribute 10% of Compensation earned by each member.

*Cost of Living Adjustment:*

For retirees prior to July 1, 2003 the Cost of Living Adjustment is equal to the negotiated rate of salary increase times 30% compounded annually.

For retirees on or after July 1, 2003, who were hired on or before July 1, 2012, the Cost of Living Adjustment is equal to 3% of the initial retirement benefit (non-compounded). This COLA is deferred for a period of 3 years for any member who retires after June 30, 2015 (COLA begins in the 4<sup>th</sup> year after date of retirement).

#### IV. ACTUARIAL COST METHODS

A. Actuarial Cost Method

Costs have been computed in accordance with the Entry Age Normal Cost Method.

The normal cost is the sum of the normal costs for all participants. For a current participant, the individual normal cost is the participant's normal cost accrual rate multiplied by the participant's current compensation. The normal cost accrual rate equals (a) the present value of future benefits as of the participant's entry age divided by (b) the present value of future compensation as of the participant's entry age. For other than a current participant, the normal cost equals \$0.

The accrued liability is the sum of the individual accrued liabilities for all participants. The individual accrued liability is equal to the present value of future benefits less the normal cost accrual rate multiplied by the present value of future compensation.

B. Asset Valuation Method

The assets used to determine plan costs are equal to the current market value, as of March 31, 2017.

C. Changes

Effective with the April 1, 2013 valuation, the amortization of the unfunded accrued liability is over a 25 year period that declines by one each year effective back to April 1, 2012. The amortization period as of April 1, 2017 is 20 years.



## V. ACTUARIAL ASSUMPTIONS

Actuarial Assumptions are estimates as to the occurrence of future events affecting the costs of the plan such as mortality rates, withdrawal rates, changes in compensation level, retirement ages, rates investment earnings, expenses, etc. The assumptions have been chosen to anticipate the long-range experience of the plan. The appropriateness of the assumptions should be viewed on an aggregate basis rather than individually, inasmuch as each interacts with the other.

The actuarial assumptions used to compute this year's plan costs are as follows:

- Investment Return: 7.50% per annum. The assumed rate of return is derived net of spending, taxes and investment expenses.
- Pre and Post Retirement Mortality: RP-2014 Blue Collar Employee/Annuitant with MP-2015 Generational Improvements from 2006 (M/F).
- Disability Mortality: RP-2014 Disabled Annuitant with MP-2015 Generational Improvements from 2006 (M/F).
- Terminations: None
- Salary Increases: 3.50% per annum
- Occupational Disability: Occupational disability assumed to equal 3 times the 1974 Railroad Retirement Board Incidence
- Assumed Retirement Age: The completion of 25 Years of Service
- Spousal Death Benefit: 75% of active participants are assumed married with one child under age 18. Spouses are assumed to be 4 years younger than the participant.
- Cost-of-Living Increases: A 3.0% non-compounded COLA for active members who retire on or after July 1, 2003. For members who retired before July 1, 2003, 30% of the negotiated salary increase, compounded annually.
- Administrative Expenses: Assumed paid by the Town

**SECTION V (Cont.)  
SELECTION OF ACTUARIAL ASSUMPTIONS**

<b>Assumption</b>	<b>Entity Who Selects Assumption</b>	<b>Basis for Assumption Selection</b>	<b>Change in Assumption</b>
Investment Return Interest Rate	The Angell Pension Group, Inc.	The investment return interest rate is developed based on the allocation of the Plan's assets by investment class and the capital market outlook for each investment class. This information is provided by the Plan's investment advisor. The assumed rate of return is derived net of spending, taxes, and investment expenses.	None
Salary Scale	The Angell Pension Group, Inc.	This assumption was set based on a review of experience under the plan and the rate increase set in recent Collective Bargaining Agreement.	None
Taxable Wage Base Increase	The Angell Pension Group, Inc.	Plan benefits do not depend on future taxable wage base.	None
IRC 415 and 401(a)(17) Limit Projection	The Angell Pension Group, Inc.	Compensation and benefits are not large enough to be impacted by these limits.	None
Pre-Retirement Mortality	The Angell Pension Group, Inc.	The Society of Actuaries published a study of retirement experience in October, 2015. As recommended by the authors of the study, the mortality tables used for the Plan include generational projection of mortality improvements using the MP-2015 projection scale.	None
Post-Retirement Mortality	The Angell Pension Group, Inc.	The Society of Actuaries published a study of retirement experience in October, 2015. As recommended by the authors of the study, the mortality tables used for the Plan include generational projection of mortality improvements using the MP-2015 projection scale.	None
Disability Mortality	The Angell Pension Group, Inc.	The Society of Actuaries published a study of retirement experience in October, 2015. As recommended by the authors of the study, the mortality tables used for the Plan include generational projection of mortality improvements using the MP-2015 projection scale.	None
Disability Rates	The Angell Pension Group, Inc.	Occupational disability assumed to equal 3 times the 1974 Railroad Retirement Board Incidence	None
Withdrawal Rates	The Angell Pension Group, Inc.	None	None
Retirement Rates	The Angell Pension Group, Inc.	Participants are assumed to retire after 25 years of service.	None
Administrative Expenses	The Angell Pension Group, Inc.	N/A	None
Percent Married	The Angell Pension Group, Inc.	75% of males and 75% of females are assumed to be married.	None
Age of Spouse	The Angell Pension Group, Inc.	The female spouse is assumed to be 4 years younger than the male spouse.	None

**VI. STATEMENT OF PLAN ASSETS, RECONCILIATION AND  
NET RETURN AS OF APRIL 1, 2017**

Statement of Plan Assets

Wilmington Trust Company Acct. #71751	
Cash	(67,263)
Collective Funds	<u>5,355,767</u>
Total Wilmington Trust Company Assets	<u>\$5,288,504</u>
<b>TOTAL VALUATION ASSETS</b>	<b><u>\$5,288,504</u></b>

ASSET RECONCILIATION AND NET RETURN

Beginning of Year

1. Market value of assets	4,795,331
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Income

2. Employer contributions	750,786
3. Employee contributions	117,991
4. Earnings	471,515
5. Total income (2 through 4)	1,340,292

Expenses

6. Benefit payments	796,428
7. Fees	50,691
8. Total expenses (6 through 7)	847,119

End of Year

9. Market value of assets (1+5-8)	5,288,504
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Rate of Return

10. Rate of return on market value of assets	10.92%
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NOTE: The rates of return are computed using the formula  $2I/(A+B-I)$  where A is the asset value at the beginning of the year, B is the asset value at the end of the year, and I is the net investment income for the year.

**VII. ACTUARIAL PRESENT VALUE OF ACCUMULATED PLAN BENEFITS**  
**As of April 1, 2017**

	<u>Number</u>	<u>Vested</u>	<u>Non-Vested</u>	<u>Total Present Value</u>
Active	13	\$2,230,016	\$510,625	\$2,740,641
Disabled	4	2,136,741	0	2,136,741
Retired <sup>1</sup>	<u>19</u>	<u>9,018,533</u>	<u>0</u>	<u>9,018,533</u>
<b>Total</b>	<b>36</b>	<b><u>\$13,385,290</u></b>	<b><u>\$510,625</u></b>	<b><u>\$13,895,915</u></b>
Total Compensation <sup>2</sup>		<u>\$934,546</u>		

<sup>1</sup> Includes two Alternate Payees under QDROs and three Beneficiaries of deceased participants.

<sup>2</sup> Pensionable compensation as of April 1, 2017.

Basis of Determination

The actuarial assumptions used in calculating the Present Value of Accumulated Plan Benefits are described in Section V of this report, with the exception that no assumption for salary increases was used.

**SECTION VIII**

**RECONCILIATION OF PLAN PARTICIPANTS**

	Active	Disabled	Retired	Total
Participants included in the 04-01-2016 valuation	15	3	18*	36
Data corrections	0	0	0	0
Terminated vested	0	0	0	0
Retired	-1	0	1	0
Disabled	-1	1	0	0
Died with beneficiary	0	0	0	0
Died without beneficiary	0	0	0	0
Alternate Payee (QDRO)	0	0	0	0
Lump sum	0	0	0	0
Terminated non-vested	0	0	0	0
Rehired	0	0	0	0
New participants	0	0	0	0
Participants included in the 04-01-2017 valuation	13	4	19*	36

\*Includes two Alternate Payees under QDROs and three Beneficiaries of deceased participants.

**SECTION IX**

**EXPECTED BENEFIT PAYMENTS IN FUTURE YEARS**

<b><u>For plan year beginning in:</u></b>	<b><u>Payments</u></b>
2017	\$840,969
2018	851,170
2019	861,375
2020	871,555
2021	883,081
2022	941,817
2023	954,304
2024	1,012,221
2025	1,024,327
2026	1,181,888
2027	1,192,515
2028	1,202,849
2029	1,212,835
2030	1,225,493
2031	1,354,405

Note: The amounts shown above are the present values at the valuation date, and its anniversaries, of the benefits expected to be paid during the plan year.