



A N G E L L

The ANGELL Pension Group, Inc.
88 Boyd Avenue
East Providence, Rhode Island 02914
Tel: 401.438.9250 • Fax: 401.438.7278
info@angellpensiongroup.com
www.angellpensiongroup.com

September 14, 2018

PERSONAL & CONFIDENTIAL
SENT VIA EMAIL ONLY

Mr. Ted Przybyla
Office of the Treasurer
Town of Scituate
P.O. Box 127
195 Danielson Pike
North Scituate, RI 02857

Re: Town of Scituate Retirement Plan for the Police Department Employees

Dear Ted:

Enclosed please find the Actuarial Valuation Report as of April 1, 2018, which outlines the funding requirements and summarizes the current position of the above-referenced plan.

This valuation includes the plan provisions included in the Collective Bargaining Agreement through June 30, 2021.

As requested the valuation report has been prepared using a discount rate of 7.50%.

It is our understanding that the Town of Scituate should provide a copy of this valuation to the State of Rhode Island by September 30, 2018 as required by the Rhode Island Retirement Security Act of 2011.

If you have any questions regarding the enclosed material, please call me at extension 202.

Sincerely,

Matthew Crawford
Defined Benefit Administrator
MCrawford@AngellPensionGroup.com

Enclosures

**TOWN OF SCITUATE RETIREMENT PLAN
FOR THE POLICE DEPARTMENT EMPLOYEES
VALUATION AS OF APRIL 1, 2018**

Prepared By:

**The Angell Pension Group, Inc.
88 Boyd Avenue
East Providence, RI 02914
Telephone (401) 438-9250**

September 2018

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I. INTRODUCTION

This report presents the results of the actuarial valuation as of April 1, 2018 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, 2018 through June 30, 2021.

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.



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

09/14/2018

Date

II. SUMMARY OF PLAN CONTRIBUTIONS

1.	Accrued Liability		
	a. Actives	\$ 3,697,105	
	b. Disabled Participants	2,135,226	
	c. Retirees	9,709,725	
	d. Total		\$15,542,056
2.	Plan Assets		5,839,817
3.	Unfunded Accrued Liability [(1d) - (2)]		\$ 9,702,239
4.	Normal Cost		
	a. Retirement	\$ 177,634	
	b. Death	2,972	
	c. Disability	21,202	
	d. Total		\$ 201,808
5.	19 Year Amortization of (3) (Payments assumed to increase by 3.5% per year)		703,080
6.	Interest on (4d) and (5) (Assumes Mid-Year Payment on October 1, 2018)		33,933
7.	19 Year Amortization Contribution payable October 1, 2018 [(4d) + (5) + (6)]		\$ 938,821*

* Town of Scituate's portion of the contribution for the fiscal year beginning April 1, 2018 will be the \$938,821 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 67½% 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 67½% 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 66½% 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 1½% 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 4th 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, 2018.

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, 2018 is 19 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:

<i>Investment Return:</i>	7.50% per annum. The assumed rate of return is derived net of spending, taxes and investment expenses.
<i>Pre and Post Retirement Mortality:</i>	RP-2014 Blue Collar Employee/Annuitant with MP-2017 Generational Improvements from 2006 (M/F).
<i>Disability Mortality:</i>	RP-2014 Disabled Annuitant with MP-2017 Generational Improvements from 2006 (M/F).
<i>Terminations:</i>	None
<i>Salary Increases:</i>	3.50% per annum
<i>Occupational Disability:</i>	Occupational disability equal to 3 times the 1974 Railroad Retirement Board Incidence
<i>Assumed Retirement Age:</i>	The completion of 25 Years of Service
<i>Spousal Death Benefit:</i>	75% of active participants are assumed married with one child under age 18. The female spouse is assumed to be 4 years younger than the male spouse.
<i>Cost-of-Living Increases:</i>	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.
<i>Administrative Expenses:</i>	Assumed paid by the Town

SELECTION OF ACTUARIAL ASSUMPTIONS

Assumption		Entity Who Selects Assumption	Basis for Assumption Selection	Change in Assumption
Investment Return Interest Rate	7.50%	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	3.50%	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	N/A	The Angell Pension Group, Inc.	Plan benefits do not depend on future taxable wage base.	None
IRC 415 and 401(a)(17) Limit Projection	N/A	The Angell Pension Group, Inc.	Compensation and benefits are not large enough to be impacted by these limits.	None
Pre-Retirement Mortality	RP-2014 Blue Collar Employee with MP-2017 Generational Improvements from 2006 (M/F)	The Angell Pension Group, Inc.	The Society of Actuaries published a study of retirement experience in October, 2014. As recommended by the authors of the study, the mortality tables used for the Plan include generational projection of mortality improvements using the MP-2017 projection scale.	The mortality tables changed from the RP-2014 Blue Collar Employee with MP-2015 Generational Improvements from 2006 (M/F) as of the prior measurement date, April 1, 2017. The change was made to reflect the best estimate of future experience under the plan. This change, together with the change in post-retirement and disability mortality, decreased the Entry Age Normal Accrued Liability as of the current measurement date, April 1, 2018, by 1.27%.
Post-Retirement Mortality	RP-2014 Blue Collar Healthy Annuitant with MP-2017 Generational Improvements from 2006 (M/F)	The Angell Pension Group, Inc.	The Society of Actuaries published a study of retirement experience in October, 2014. As recommended by the authors of the study, the mortality tables used for the Plan include generational projection of mortality improvements using the MP-2017 projection scale.	The mortality tables changed from the RP-2014 Blue Collar Healthy Annuitant with MP-2015 Generational Improvements from 2006 (M/F) as of the prior measurement date, April 1, 2017. The change was made to reflect the best estimate of future experience under the plan. This change, together with the change in pre-retirement and disability mortality, decreased the Entry Age Normal Accrued Liability as of the current measurement date, April 1, 2018, by 1.27%.

SELECTION OF ACTUARIAL ASSUMPTIONS

Assumption		Entity Who Selects Assumption	Basis for Assumption Selection	Change in Assumption
Disability Mortality	RP-2014 Disabled Annuitant with MP-2017 Generational Improvements from 2006 (M/F)	The Angell Pension Group, Inc.	The Society of Actuaries published a study of retirement experience in October, 2014. As recommended by the authors of the study, the mortality tables used for the Plan include generational projection of mortality improvements using the MP-2017 projection scale.	The mortality tables changed from the RP-2014 Disabled Annuitant with MP-2015 Generational Improvements from 2006 (M/F) as of the prior measurement date, April 1, 2017. The change was made to reflect the best estimate of future experience under the plan. This change, together with the change in pre-retirement and post-retirement mortality, decreased the Entry Age Normal Accrued Liability as of the current measurement date, April 1, 2018, by 1.27%.
Disability Rates	Occupational disability assumed to equal 3 times the 1974 Railroad Retirement Board Incidence	The Angell Pension Group, Inc.	This assumption was set based on a review of experience under the plan.	None
Withdrawal Rates	None	The Angell Pension Group, Inc.	The incidence of Withdrawal under the plan is negligible.	None
Retirement Rates	Participants are assumed to retire after 25 years of service.	The Angell Pension Group, Inc.	This assumption was set based on a review of experience under the Plan.	None
Administrative Expenses	N/A	The Angell Pension Group, Inc.	Assumed paid by the Town.	None
Percent Married	75% of males and 75% of females are assumed to be married.	The Angell Pension Group, Inc.	This assumption was set based on a review of experience under the Plan.	None
Age of Spouse	The female spouse is assumed to be 4 years younger than the male spouse.	The Angell Pension Group, Inc.	This assumption was set based on a review of experience under the Plan.	None

**VI. STATEMENT OF PLAN ASSETS, RECONCILIATION AND
NET RETURN AS OF APRIL 1, 2018**

Statement of Plan Assets

Broadridge Matrix Trust Company Acct. #71751	
Cash	\$ (73,379)
Collective Funds	<u>5,913,196</u>
 TOTAL VALUATION ASSETS	 \$ 5,839,817

ASSET RECONCILIATION AND NET RETURN

Beginning of Year

1. Market value of assets	\$ 5,288,504
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Income

2. Employer contributions	856,215
3. Employee contributions	116,018
4. Earnings	504,203
5. Total income (2 through 4)	1,476,436

Expenses

6. Benefit payments	868,346
7. Fees	56,777
8. Total expenses (6 through 7)	925,123

End of Year

9. Market value of assets (1+5-8)	\$ 5,839,817
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Rate of Return

10. Rate of return on market value of assets	10.62%
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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, 2018

	<u>Number</u>	<u>Vested</u>	<u>Non-Vested</u>	<u>Total Present Value</u>
Active	12	\$ 1,780,368	\$ 601,310	\$ 2,381,678
Disabled	4	2,135,226	0	2,135,226
Retired ¹	<u>20</u>	9,709,725	0	9,709,725
Total	36	\$ 13,625,319	\$ 601,310	\$ 14,226,629
Total Compensation ²		\$ 935,534	\$ 935,534	

¹ Includes two Alternate Payees under QDROs and three Beneficiaries of deceased participants.

² Pensionable compensation as of April 1, 2018.

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.

VIII. RECONCILIATION OF PLAN PARTICIPANTS

	Active	Disabled	Retired	Total
Participants included in the 04-01-2017 valuation	13	4	19*	36
Data corrections	0	0	0	0
Terminated vested	0	0	0	0
Retired	-1	0	1	0
Disabled	0	0	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 04-01-2018 valuation	12	4	20*	36

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

IX. EXPECTED BENEFIT PAYMENTS IN FUTURE YEARS

<u>For Plan Year Beginning:</u>	<u>Payments</u>
2018	\$ 860,091
2019	868,042
2020	875,949
2021	885,176
2022	963,556
2023	975,001
2024	1,045,671
2025	1,056,358
2026	1,217,375
2027	1,226,207
2028	1,234,612
2029	1,244,342
2030	1,256,729
2031	1,385,506
2032	1,392,894

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.