



A N G E L L

September 13, 2016

**PERSONAL & CONFIDENTIAL**

Mr. Theodore J. Przybyla  
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***Re: Town of Scituate Retirement Plan for the Police Department Employees***

Dear Mr. Przybyla:

Enclosed please find the Actuarial Valuation Report as of April 1, 2016, 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, 2018.

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, 2016 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 186.

Sincerely,

Richard M. Rosenfeld, QPA, QKA  
Senior Pension Account Administrator  
rosenfeld@angellpensiongroup.com  
admlet4012016.doc/a1261a/rmr

Enclosures

**TOWN OF SCITUATE RETIREMENT PLAN  
FOR THE POLICE DEPARTMENT EMPLOYEES  
VALUATION AS OF APRIL 1, 2016**

**Based on a Discount Rate of 7.50%**

**Prepared By:**

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

**September 2016**

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## I. INTRODUCTION

This report presents the results of the actuarial valuation as of April 1, 2016 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.



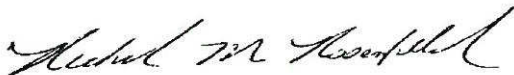
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Jean M. Wilson, E.A.  
Member, American Academy of Actuaries

9/13/2016

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Date



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Richard M. Rosenfeld, QPA, QKA  
Senior Pension Account Administrator

## II. SUMMARY OF PLAN CONTRIBUTIONS

1.	Accrued Liability		
	a.	Actives	\$4,434,646
	b.	Disabled Participants	\$1,356,710
	c.	Retirees	<u>\$8,224,436</u>
	d.	Total	\$14,015,792
2.	Plan Assets		\$4,795,331
3.	Unfunded Accrued Liability [(1d) - (2)]		\$9,220,461
4.	Normal Cost		
	a.	Retirement	\$178,647
	b.	Death	\$ 2,652
	c.	Disability	<u>\$ 22,565</u>
	d.	Total	\$203,864
5.	21 Year Amortization of (3) (Payments assumed to increase by 3.5% per year)		\$624,922
6.	Interest on (4d) and (5) (Assumes Mid-Year Payment on October 1, 2016)		\$31,079
7.	21 Year Amortization Contribution payable October 1, 2016 [(4d) + (5) + (6)]		\$859,866*

\* Town of Scituate's portion of the contribution for the fiscal year beginning April 1, 2016 will be the \$859,866 reduced by the actual amount of employee contributions.

### III. SUMMARY OF PLAN PROVISIONS

<i>Eligibility Requirements:</i>	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.
<i>Normal Retirement Date:</i>	For participants hired on or 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.
<i>Compensation:</i>	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.
<i>Average Compensation:</i>	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.
<i>Normal Retirement Benefit:</i>	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.
<i>Optional Retirement Date:</i>	A participant may retire upon the completion of ten years of service or the attainment of age 56, whichever is later.
<i>Normal Form of Benefit:</i>	Life annuity for single participants and an unreduced 67.5% Joint and Survivor Annuity for married participants.
<i>Pre-Retirement Death Benefit:</i>	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 66⅔% 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.

*Post Retirement Death Benefit:*

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).

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  $66\frac{2}{3}\%$  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  $1\frac{2}{3}\%$  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, 2016.

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, 2016 is 21 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

Assumption	Entity Who Selects Assumption	Basis for Assumption Selection	Change in Assumption
Investment Return Interest Rate	Town of Scituate	Chosen by plan sponsor. 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
Inflation Rate	The Angell Pension Group, Inc.	This assumption was set based on a review of experience under the plan.	None
Salary Scale	N/A	This assumption was set based on a review of experience under the plan and the rate increase set in recent Collective Bargaining Agreement.	The Salary Scale Assumption was changed from 4.00% used in the April 1, 2015 valuation to 3.50% for the April 1, 2016 valuation. This change was made to reflect the most recent Collective Bargaining Agreement. This change decreased the liabilities as of April 1, 2016 by 0.60%.
Taxable Wage Base Increase	N/A	Plan benefits are frozen and do not depend on future taxable wage base.	None
IRC 415 and 401(a)(17) Limit Projection	N/A	Projected increases to benefit and pay limits are not applicable under the Actuarial Funding Method.	None
Pre-Retirement Mortality	Town of Scituate	Chosen by plan sponsor. The Society of Actuaries published a study of retirement experience in October, 2015. The MP-2015 Generational Improvements from 2006 presented in the study represent the most current and complete benchmarks of U.S. private pension plan mortality experience. 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.	The mortality tables changed from the RP-2014 Blue Collar Employee with MP-2014 Generational Improvements from 2006 (M/F) tables as of the prior measurement date, April 1, 2015. The change was made to reflect the best estimate of future experience under the plan. This change, together with the change in post-retirement mortality, decreased the liabilities as of the current measurement date, April 1, 2016, by 0.67%.
Post-Retirement Mortality	Town of Scituate	Chosen by plan sponsor. The Society of Actuaries published a study of retirement experience in October, 2015. The MP-2015 Generational Improvements from 2006 presented in the study represent the most current and complete benchmarks of U.S. private pension plan mortality experience. 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.	The mortality tables changed from the RP-2014 Blue Collar Employee with MP-2014 Generational Improvements from 2006 (M/F) tables as of the prior measurement date, April 1, 2015. The change was made to reflect the best estimate of future experience under the plan. This change, together with the change in pre-retirement mortality, decreased the liabilities as of the current measurement date, April 1, 2016, by 0.67%.

## SECTION V (Cont.)

## SELECTION OF ACTUARIAL ASSUMPTIONS

Assumption	Entity Who Selects Assumption	Basis for Assumption Selection	Change in Assumption
Disability Mortality	RP-2014 Disabled Annuitant with MP-2015 Generational Improvements from 2006 (M/F)	This assumption was set based on a review of experience under the plan.	The mortality tables changed from the RP- 2014 Blue Collar Employee with MP-2014 Generational Improvements from 2006 (M/F) tables as of the prior measurement date, April 1, 2015. The change was made to reflect the best estimate of future experience under the plan. This change, together with the change in pre and post- retirement mortality, decreased the liabilities as of the current measurement date, April 1, 2016, by 0.67%.
Disability Rates	Occupational disability assumed to equal 3 times the 1974 Railroad Retirement Board Incidence	This assumption was set based on a review of experience under the plan.	None
Withdrawal Rates	None	The incidence of Withdrawal under the plan is negligible.	None
Retirement Rates	Participants are assumed to retire after 25 years of service.	This assumption was set based on a review of experience under the Plan.	None
Administrative Expenses	N/A	Assumed paid by the Town.	None
Percent Married	75% of males and 75% of females are assumed to be married.	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.	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, 2016**

Statement of Plan Assets

Wilmington Trust Company Acct. #71751

Cash	(52,382)
Collective Funds	<u>4,847,713</u>

Total Wilmington Trust Company Assets	<u>\$4,795,331</u>
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TOTAL VALUATION ASSETS	<u>\$4,795,331</u>
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ASSET RECONCILIATION AND NET RETURN

Beginning of Year

1. Market value of assets	4,787,924
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Income

2. Employer contributions (Includes \$27,095 for FYE 3/31/15)	791,828
3. Employee contributions	144,719
4. Earnings	(169,423)
5. Total income (2 through 4)	767,124

Expenses

6. Benefit payments	712,962
7. Fees	46,755
8. Total expenses (6 through 7)	759,717

End of Year

9. Market value of assets (1+5-8)	4,795,331
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Rate of Return

10. Rate of return on market value of assets	(3.47)%
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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, 2016**

	<u>Number</u>	<u>Vested</u>	<u>Non-Vested</u>	<u>Total Present Value</u>
Active	15	\$2,764,640	\$556,225	\$3,320,865
Disabled	3	1,356,710	0	1,356,710
Retired <sup>1</sup>	<u>18</u>	<u>8,224,436</u>	<u>0</u>	<u>8,224,436</u>
Total	36	<u>\$12,345,786</u>	<u>\$556,225</u>	<u>\$12,902,011</u>
Total Compensation <sup>2</sup>		<u>\$ 1,111,367</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, 2016.

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**

	<b>Active</b>	<b>Disabled</b>	<b>Retired</b>	<b>Total</b>
Participants included in the 04-01-2015 valuation	15	3	18	36
Data corrections	0	0	0	0
Terminated vested	0	0	0	0
Retired	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 04-01-2016 valuation	15	3	18*	36

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

**SECTION IX**

**EXPECTED BENEFIT PAYMENTS IN FUTURE**

<b><u>For plan year beginning in:</u></b>	<b><u>Payments</u></b>
2016	\$ 776,354
2017	786,688
2018	797,053
2019	808,623
2020	820,192
2021	831,835
2022	892,980
2023	904,433
2024	964,830
2025	975,968
2026	1,144,107
2027	1,155,387
2028	1,166,433
2029	1,177,204
2030	1,190,944

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.