

December 24, 2018

The Honorable Dan Rosenthal
TOWN OF NEWTOWN
3 Primrose St.
Newtown, CT 06470

Re: Town of Newtown Pension Plan - Police Personnel
Our File No. 2823

Dear First Selectman Rosenthal:

We are pleased to present your Annual Valuation Report for the Police Pension Plan as of July 1, 2018.

For the 2019-2020 Fiscal Year of the Town, we are recommending a contribution as follows:

Recommended As of July 1, 2019: \$988,509

This represents a modest increase from last year, when the recommended contribution was \$974,971. Several factors including the DROP participation of three Participants and salary decreases among actuarially key participants helped offset other items that would have resulted in an increase of 10% or more in the contribution for next year.

Please see the General Comments section of the report for more details on the ongoing funding progress of the plan.

Please note the Actuarial Certification, which is included on page 2 of this letter.

Please let me know if you have any questions or comments concerning this report.

My direct phone line is (386)206-8932.

Sincerely,



David G. Leonard, A.S.A.
Account Executive

cc: Ellen Whelan
Robert Tate

Enclosures

ACTUARIAL CERTIFICATION

This report has been prepared in accordance with generally accepted actuarial standards and procedures and conforms to the Guidelines for Professional Conduct of the American Academy of Actuaries.

The valuation is based on employee and plan financial data which were provided by the Plan Administrator, Plan Trustee, and various financial institutions. All information submitted to us has been reviewed for reasonableness and consistency, but has otherwise been accepted and relied upon without audit. The plan provisions and other material assumptions are disclosed in report in their respective sections.

Projected mortality improvements have been recognized through the use of RP 2014 SOA Blue Collar tables with projection scale MP-2017. This represents a change from 2017 when the prior year's projection scale, MP-2016 was employed.

To the best of our knowledge, the information supplied in this report is complete and accurate.

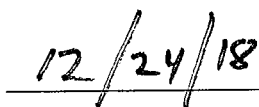
Future actuarial measurements may differ significantly from the current measurement presented in this report due to such factors as the following: plan experience differing from that anticipated; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation 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.

I, David G. Leonard, A.S.A., E.A., am a member of the Society of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained here



David G. Leonard, A.S.A.

Enrollment #17-03604



Date

ANNUAL VALUATION REPORT
FOR
TOWN OF NEWTOWN PENSION PLAN
POLICE DEPARTMENT PERSONNEL
AS OF JULY 1, 2018

Prepared by:

David G. Leonard, ASA
T R PAUL, INC.

December 24, 2018

TOWN OF NEWTOWN PENSION PLAN – POLICE PERSONNEL

TABLE OF CONTENTS

	PAGE	
I.	HIGHLIGHTS	1
II.	GENERAL COMMENTS	2
III.	PLAN ASSETS	
	a. Summary	3
	b. Development of Valuation Assets (Actuarial Value of Assets)	4
	c. Smoothed Valuation Asset and Unrecognized (G)/L Detail	5
IV.	CALCULATION OF RECOMMENDED CONTRIBUTION	6 - 7
	GAS NO. 67 AND FAS NOS. 35 & 36 INFORMATION	8
V.	HISTORICAL INFORMATION	9
VI.	PARTICIPANT DATA RECONCILIATION	10

APPENDICES

A.	PENSION TRUST SUMMARY	11 - 13
B.	ACTUARIAL ASSUMPTIONS	14

TOWN OF NEWTOWN PENSION PLAN POLICE PERSONNEL

I. HIGHLIGHTS

This section of the report summarizes the results of the July 1, 2018 actuarial valuation and provides a comparison with the results of the prior valuation. The development of these items for the current valuation is shown in the remaining sections of the report. The percentage in parenthesis express each amount as a percentage of covered payroll:

	July 1, 2018 <u>Valuation</u>	July 1, 2017 <u>Valuation</u>
1. Recommended Annual Contributions:*	\$988,509 (27.1%)	\$974,971 (25.1%)
2. Covered Payroll of Participants (covered earnings for the fiscal year preceding the valuation date)	\$3,651,597	\$3,888,389
3. Net Normal Cost (EAN / PUC)	\$343,564 (9.4%)	\$372,653 (9.6%)
4. Accrued Actuarial Liability (EAN)	\$24,010,717	\$23,083,423
5. Assets - Market Value (MV)	\$16,313,268	\$15,078,119
- Valuation Assets (VA)	\$16,666,070	\$15,851,388
6. Unfunded Accrued Liability (VA)	\$7,344,647	\$7,231,035
7. Actuarial Value of Benefits (total plan):		
a. Value of Vested Accrued Benefits	\$20,778,570	\$20,174,132
b. Value of Non-Vested Accrued Bens.	\$107,780	\$295,807
c. MV Assets in excess of Vested Benefits (5 minus 7a)	(\$4,465,302)	(\$5,096,013)
8. Number of Participants:		
a. Active Participants	39	42
b. Retirees, DROPs, Benef., & Alt Payees	31	28
c. Terminated Vested Participants (includes refunds only due)	<u>4</u>	<u>4</u>
d. Total	74	74

* Calculated assuming beginning of the next fiscal year payment, for that fiscal year.

TOWN OF NEWTOWN PENSION PLAN - POLICE PERSONNEL

II. GENERAL COMMENTS

The recommended contribution produced by the July 1, 2018 valuation increased \$9,803, to a recommended level of \$984,774 for the 2019-20 fiscal year.

A summary of the factors in the change for the year reveals the following:

Change in Normal Cost (N.C):	\$ (1,390)
Valuation Asset Losses:	56,261
Retiring Members N.C.:	(40,504)
Change in Assumptions (phased in interest rates)	48,308
Misc. Actuarial Factors:	(52,873)
Total Changes:	\$ 9,803

Effective July 1, 2018, a DROP program was instituted that allows police officers who are eligible for Normal Retirement to have their pension payments commence and be deposited into an alternate retirement account, while continuing to work for up to five years. At actual retirement, the accumulated DROP account is paid to the retiree in a lump sum. His monthly pension payments will continue at the initial DROP rate.

For the purpose of the plan, the three members who took immediate advantage of the DROP (Deferred Retirement Option Program) are now considered retired, and the removal of their normal costs helped keep the total Police contribution in check.

The two factors that added significant costs were the continued phasing in of the 7% interest assumption and valuation asset losses.

This year we are weighting the 7.00% calculations at 66.6% and the 7.5% calculations at 33.3%, which resulted in the increase in costs of \$48,308 as shown above. There is one more year of the phase in, so you can expect a similar increase from this factor next year as well. Without the phase in, the 7.00% recommended contribution level for 2019-20 would have been \$1,033,182.

The valuation assets produced a yield of 4.22%, despite the market value return on assets of 7.30%. As discussed previously (and in more detail in the Town Plan's 2018 report), prior unrecognized losses are gradually being brought into the cost calculations, which is why there is the differential in returns, and why the trust asset performance added to the contribution requirements for next year by \$56,261.

In the breakdown above, we list "Misc. Actuarial Factors" as a major downward (negative) component in the overall minor change for the year, teaming with the DROP retirees to offset the change in assumptions and Valuation Asset losses.

This seemed like a large decrease to us, even though it is really only about 5% of the total annual contribution. Nevertheless, it was important to identify the reason for such a large drop in costs, and it turned out to be a salary related issue.

TOWN OF NEWTOWN PENSION PLAN - POLICE PERSONNEL

II. GENERAL COMMENTS

Unlike the Town Plan, salaries for the Police Union members can be very volatile, because their overtime pay is also included in their pensionable earnings (up to 25% of base). This year, although the average continuing active salary increase was 5.02%, there were three particular participants who are close to retirement whose pension compensation decreased significantly. Because of their long service and higher than average ages, large swings in their final projected average salaries resulted in more than \$100,000 in actuarial gains.

While not the entire reason for the “Miscellaneous Actuarial Factors” gains, these three members’ decline in liabilities was a major part of it. An additional factor was the update in mortality tables also contributed to the gain, as the longevity projections originally included by the Society of Actuaries in their 2014 report have been reduced each year since then.

We always include the most current published updated in the projected mortality rates; for this year it is the 2017 projections.

The plan’s funding ratios for actuarial liability and present values of accrued benefits both rose this year, to 68% and 78% respectively. While these gains are welcome, this plan still lags behind the Town Plan in both measures. As the plan’s active population shrinks, the trust asset performance and the longevity of the growing retired population could cause radical changes in the annual contribution as a percentage of active payroll.

With that said, we would expect the actual dollar amount of the contribution to level off and begin slowly declining unless further assumed interest rate cuts are mandated, or the trust assets endure several very bad years.

Note that the trust assets in this report differ from the GASB statement in that prepaid benefits are not included in the GASB disclosures.

TOWN OF NEWTOWN PENSION PLAN POLICE PERSONNEL

III. PLAN ASSETS

A. Summary

Investment	07/01/2017 Beginning Balance	Employer Contribs.	Employee Contribs.	Net Investment Income	Trust Expenses	Transfer EEs Distributions	Transfers out	06/30/2018 Ending Balance
ER Contrib. Receivable/(Payable)	0	0	0	0	0	0	0	0
EE Contrib. Receivable	14,126	0	(11,688)	0	0	0	0	2,439
Distribution Due PARS	42	0	0	(42)	0	(3,095)	0	(3,095)
Prepaid Benefits	178,330	0	0	0	0	(11,553)	0	166,777
<u>Wells Fargo / Westport Resources</u>								0
Cash	701,182	1,896,113	490,574	1,274,144	(112,775)	(2,099,811)	(1,802,504)	346,923
Investments	38,762,085	0	0	1,885,941	0	0	1,802,504	42,450,530
Accrued Interest	118,448	0	0	(115,843)	0	0	0	2,604
<u>PLAN TOTALS</u>	39,774,214	1,896,113	478,886	3,044,199	(112,775)	(2,114,459)	0	42,966,178

Distribution of Assets by Department

Plan Category	07/01/2017 Beginning Balance	Employer Contribs.	Employee Contribs.	Net Investment Income	Distributions*	06/30/2018 Ending Balance	06/30/2018 Valuation Asset Balance
Town Plan	24,549,593	1,070,329	282,586	1,780,926	(1,130,926)	26,552,508	27,126,749
Elected officials	150,979	10,810	3,434	10,362	(75,182)	100,404	N/A
Police Plan	15,073,641	814,974	192,867	1,140,136	(908,350)	16,313,268	16,666,070
Grand Total	39,774,214	1,896,113	478,887	2,931,424	(2,114,459)	42,966,179	43,792,819

* Income reduced for trust expenses; allocated on a weighted basis. Distributions adjusted for internal employee transfers.

TOWN OF NEWTOWN PENSION PLAN POLICE PERSONNEL

III. PLAN ASSETS (Continued)

B. Development of Valuation Assets (Actuarial Value of Assets)

The Actuarial Valuation of Assets is calculated by recognizing 20% of the current year's actuarial gain or loss (to the 7.5% assumed rate of return), along with recognition of prior year's gains or losses that are also being recognized 20% per year. The final Valuation Asset level is subject to a corridor of 80% to 120% of the Market Value.

The prior smoothed actuarial asset valuation method was changed for the July 1, 2015 valuation, using the initial unrecognized gains from July 1, 2015 as the only prior base in place.

This method was then modified slightly for 2016 to anticipate Market Value yield at the assumed rate, rather than Expected Valuation Asset Value yield. Please see following page for additional detail.

The following illustrates the calculation of the Actuarial Value of Assets for June 30, 2018:

1. Assumed market value yield at valuation rate*	\$2,792,502
2. Actual MV Yield for June 30, 2018 **	2,921,062
3. Current Year (Gain)/Loss on Market value yield* (1) - (2)	(128,559)
4. Portion of Curr. Yr. Loss to be Recognized in 2018 (3) x 20%	(25,712)
5. Portion of Current Years (Gain)/Loss Not Recognized in 2018	(102,848)
6. Prior Unrec. (Gains)/ losses - June 30, 2018 - see next page	1,029,890
7. Total Unrecognized (Gains)/Losses (5) + (6)	927,043
8. Market Value of Trust Assets as of June 30, 2018	42,865,776
9. Preliminary Actuarial Value of Assets - June 30, 2018 (7)+(8)	\$43,792,819
10. (a) 80% corridor of Market Value	34,292,621
(b) 120% corridor of Market Value	51,438,931
11. Final Actuarial Value of Assets - June 30, 2018***	\$43,792,819

The Preliminary Actuarial Value of Assets is 102.2% of the Market Value, and thus falls within the 80% to 120% corridor of actual June 30, 2018 Market Value.

The yield on Valuation Assets for the 2017-2018 Plan Year was 4.22%.

* Assumed income is calculated based on a weighted balance which takes into account the date that the contributions and distributions are made to the fund.

** All items shown exclude the Money Purchase Plan assets. There were no receivable contributions as of the end of the fiscal year.

*** Includes both Town Plan and Police Plan

TOWN OF NEWTOWN PENSION PLAN POLICE PERSONNEL

III. PLAN ASSETS (Continued)

C. SMOOTHED VALUATION ASSET AND UNRECONGNIZED (G)/L DETAIL- INCLUDES TOWN AND POLICE PLAN

Smoothed Valuation Asset Calculation

	Transition Year <u>07/01/2014</u>	<u>06/30/2015</u>	<u>06/30/2016</u>	<u>06/30/2017</u>	<u>06/30/2018</u>	<u>06/30/2019</u>	<u>06/30/2020</u>
Actuarial Value of Assets	\$36,445,798						
Market Value of Assets	34,676,083	35,698,524	34,740,866	39,623,234	42,865,776		
Unrecognized (G)/L	1,769,715						
Recognized in Year (for 6/30/15)	(442,429)						
Expected Earnings at Market Value (7.50%/7.00%)*		2,662,813	2,730,057	2,680,400	2,792,502		
Actual Earnings MV		977,145	(1,017,424)	4,614,032	2,921,062		
Actuarial (Gain)/Loss on MV		1,685,668	3,747,481	(1,933,631)	(128,559)		
Recognition of current years (Gain)/Loss		(337,134)	(749,496)	386,726	25,712		

Anticipated Unrecognized (Gain)/Loss for Future Years

Remaining Unrecognized (G)/L - 7/1/14 Trans.		1,327,286	1,061,829	707,886	353,943	0	0
Remaining Unrecognized (G)/L - 6/30/15 (G)/L		1,348,534	1,011,401	674,267	337,134	0	0
Remaining Unrecognized (G)/L - 6/30/16 (G)/L			2,997,985	2,248,489	1,498,992	749,496	0
Remaining Unrecognized (G)/L - 6/30/17 (G)/L				(1,546,905)	(1,160,179)	(773,452)	(386,726)
Remaining Unrecognized (G)/L - 6/30/18 (G)/L					(102,848)	(102,848)	(102,848)
Remaining Unrecognized (G)/L - 6/30/19 (G)/L						0	0
Total Unrecognized (Gains)/Losses		2,675,820	5,071,214	2,083,737	927,043	(126,804)	(489,574)
Market Value of Assets - EOY		35,698,524	34,740,866	39,623,234	42,865,776		
Total Unrecognized (Gain)/Loss		2,675,820	5,071,214	2,083,737	927,043		
Actuarial Value of Assets - EOY		\$38,374,344	\$39,812,081	\$41,706,971	43,792,819		

* Calculated using weighted contributions - ER by date, EE at 50%, Distrib at 50%. 7.00% interest assumption effective July 1, 2017 forward.

Note: 6/30/2015 Valuation Assets shown above based on the "new" method and do not equal the Valuation Assets used for the July 1, 2015 valuation Report.

Outstanding balance of 2018 unrecognized gain for 2021 Valuation not shown.

TOWN OF NEWTOWN PENSION PLAN - POLICE PERSONNEL

IV. ANNUAL VALUATION - JULY 1, 2018

a. Calculation of Recommended Contributions

	7.5%	7.0%	Difference
1. Gross Normal Cost as of 7/1/2018	\$460,815	\$519,144	\$58,329
2. Expenses	7,000	7,000	
3. Expected Employee Contributions	182,580	182,580	
4. Net Normal Cost (1 + 2 - 3) as of 7/1/2018	285,235	343,564	\$58,329
5. Accrued Liability:			
i. Active Employees	10,302,933	11,084,963	782,030
ii. Inactive Employees	730,238	783,575	53,337
iii. Retired Participants (includes DROP)	11,618,922	12,142,179	523,257
6. Total Accrued Liability	\$22,652,093	\$24,010,717	\$1,358,624
7. Valuation Assets - Smoothed Value	16,666,070	16,666,070	
8. Unfunded (overfunded) Accrued Liability (6 - 7)	5,986,024	7,344,647	\$1,358,624
9. Amortization of Unfunded (Overfunded) Accd. Liability*	535,733	620,577	\$84,844
10. Normal Cost plus Amortization as of 7/1/2018 (4 + 9)	820,967	964,141	\$143,174
11. Recommended Contribution for 2019-2020 to be paid 7/01/2019 (10 adjusted for time passage**)	\$891,894	\$1,036,817	\$144,924
12. Blended Recommended Contribution Blended: 1/3 (7.5%) + 2/3 (7.0%)	\$988,509		

* Initial EAN Base amortized over 20 years. Future (gains)/losses will be amortized over 10 years.

** 2019 adjustment takes into account the expected increases from unrecognized trust asset losses for 2019, plus normal cost increases assumed in the funding method.

TOWN OF NEWTOWN PENSION PLAN - POLICE PERSONNEL

IV. ANNUAL VALUATION - JULY 1, 2018

b. Summary of Funding Bases

Summary of Funding Bases	Initial Base	Rem. Bal. -18	Min. Amort.	Rem. Yrs (at min)
Initial Base - 7/1/17	\$ 7,231,035	\$ 7,466,353	\$ 637,905	19
(Gain)/Loss/Amend/Changes - 2018	\$ (121,706)	\$ (121,706)	\$ (17,328)	10
Totals	\$ 7,109,329	\$ 7,344,647	\$ 620,577	

Funding Bases shown at 7.0% only.

If remaining balance is greater than the initial base, then negative amortization has occurred.

- this is an expected result based on the phasing in of the 7.0% discount assumption.

TOWN OF NEWTOWN PENSION PLAN - POLICE PERSONNEL

IV. ANNUAL VALUATION - JULY 1, 2018

b. GASB Statement 67 and FASB
Statement 35/36 Information

I. ACCRUED ACTUARIAL LIABILITY (7.0%)

a. Retirees/Benefic./Terminated	\$12,925,754
b. Current Employees	
I. EE Contr. & Intr.	2,736,335
II. ER Financed Vested	7,722,018
III. ER Financed Non-Vested	626,610
c. TOTALS	24,010,717
d. ASSETS - Market Value	16,313,268
e. FUNDED RATIO (7/1/2018)	67.94% - at 7.00%
f. FUNDED RATIO (7/1/2017)	65.32% - at 7.00%
<i>- These results will differ from the actual GASB disclosures, which are based on projected liabilities in order to ensure timely delivery.</i>	

II. PRESENT VALUE OF ACCRUED BENEFITS (PVAB)

a. Retirees/Benefic./Terminated	\$12,925,754
b. Current Employees	
I. EE Contr. & Intr.	2,736,335
II. ER Financed Vested	5,116,481
III. ER Financed Non-Vested	107,780
c. TOTALS	20,886,350
d. ASSETS - Market Value	16,313,268
e. FUNDED RATIO (7/1/2018)	78.10% - at 7.00%
f. FUNDED RATIO (7/1/2017)	73.66% - at 7.00%

TOWN OF NEWTOWN PENSION PLAN - POLICE PERSONNEL

V. HISTORY OF PLAN CONTRIBUTIONS AND LIABILITIES

Plan Year Beginning	Participants Act. - Other		Compensation	Accrued Liability	Market Value Assets	Unfunded Accrued Liability**	Recommended Contribution	(***)	Actual Town Contribution
1/1/1990	28	3	\$1,028,594	\$1,897,742	\$1,570,259	\$327,483	\$105,873	(10.29%)	\$120,889
7/1/1995	34	6	1,603,088	4,116,224	3,468,628	647,596	209,628	(13.08%)	209,628
7/1/2000	36	13	1,768,798	6,912,642	7,444,398	(531,756)	102,234	(5.78%)	150,000
7/1/2005	42	16	2,637,458	9,515,132	8,763,251	751,881	214,000	(8.11%)	213,647
7/1/2010	46	23	3,579,566	12,755,035	9,897,841	2,857,194	460,540	(12.87%)	472,764
7/1/2014	40	28	3,393,213	16,582,292	13,696,532	2,885,760	615,427	(18.14%)	615,427
7/1/2015	43	30	3,793,179	18,056,413	14,059,437	3,996,976	586,601	(15.46%)	586,601
7/1/2016	43	32	3,809,065	19,153,240	13,586,528	5,566,712	685,944	(18.01%)	685,944
7/1/2017	42	32	3,888,389	23,082,423	15,078,119	8,004,304	814,974	(20.96%)	814,974
7/1/2018	39	35	3,658,639	24,010,717	16,313,268	7,697,449	974,971	(26.65%)	

* Compensation shown is expected for the twelve months following the valuation date for active members only.

**Based on Market Value, not Valuation Assets.

*** Figures in parenthesis are Recommended Contribution as a percentage of compensation. Recommended Contribution is based on prior year's valuation rolled forward, not on current valuation. The 2018 valuation produced a Recommended Contribution of \$988,509 for the 2019-2020 plan

**** Beginning 7/1/2017 the actuarial liability is calculated at a 7.0% interest rate.

TOWN OF NEWTOWN PENSION PLAN POLICE PERSONNEL

VI. PARTICIPANT DATA RECONCILIATION

The total number of active plan participants as of the current valuation date is reconciled with the total number as of the prior valuation date as follows:

	<u>Police Personnel</u>
Number of Active Participants as of July 1, 2017:*	42
Decreases:	
Non-Vested Terminations:	0
Vested Terminations:	0
Retirements (DROP Actives):	(3)
Deaths, Withdrawals:	<u>0</u>
Total Increases/(Decreases):	(3)
New Entrants during 2017-2018:	<u>0</u>
Net Change:	(3)
Number of Active Participants as of July 1, 2018:*	39
Also as of July 1, 2018:	
Total Vested Terminated (incl. refunds due):	4
Total Retired:**	<u>31</u>
TOTAL PARTICIPANTS:	74

* Active participants include members beyond their
Normal Retirement Dates.

** Includes Alternate Payee, Beneficiaries and DROP participants.

TOWN OF NEWTOWN PENSION PLAN - POLICE PERSONNEL

APPENDIX APENSION TRUST SUMMARY

PLAN SPONSOR: Town of Newtown
 EFFECTIVE DATE: July 1, 1965
 ANNIVERSARY DATE: July 1 of each year.
 VALUATION DATE: July 1, 2018

DEFINITIONS

Compensation: Total compensation limited each year to 125% of base compensation.
 Final Average Compensation includes the participants highest 36 consecutive months.

Participation: Eligibility - Service: 6 Months
 Maximum Age: 60

The Plan was closed to new entrants as of May 5, 2015.

Entry Date: On the first day of the month following satisfaction of eligibility.

Service: Continuous employment with the Town.

Credited Service: Service used in the determination of plan benefits. Includes all service except:

- (1) Service in excess of 30 years.
- (2) Service after July 1, 1965 during which an employee could have made employee contributions but did not.
- (3) Service prior to July 1, 1965 if an employee did not elect to be covered on that date.

Normal Retirement Date: First of the month coinciding with or following the earlier of:

- (1) Age 60 with at least 10 years of continuous Credited Service.
- (2) 25 years of Service at any age.

Early Retirement Date: Anytime after completing 20 years of Service.

Normal Retirement Benefit: 2.25% of Final Average Compensation times years of Credited Service.

PENSION TRUST SUMMARY - Continued

Early Retirement Benefit:	Accrued Benefit reduced 6% for each year prior to Normal Retirement Date.
Normal Form of Benefit:	Modified Cash Refund Annuity.
Disability:	
Eligibility:	At least one year of service and unable to work in any occupation.
Benefit:	2.25% of base salary times years of Credited Service subject to a minimum of 25% of base salary and one of the following maximums: <ul style="list-style-type: none"> (1) Job related disability - 85% of base salary less any other Town funded disability benefits (Social Security, Worker's Compensation, etc.). (2) Non-job related disability - 50% of base salary.
Pre-Retirement Spouse's Benefit:	The following benefits are available to the spouse of an actively employed policeman who dies: <ul style="list-style-type: none"> (1) Death incurred in the line of duty - 50% of a Policeman's Normal Retirement Benefit, assuming salary and service would have continued to Normal Retirement Date. There is no age or service requirement for this benefit. The benefit stops when the spouse remarries or dies. (2) Death not incurred in the line of duty - Benefit is equal to the 50% Joint and Survivor Benefit that would have been available if the policeman had retired on his date of death. Participant must have been eligible for Early or Normal Retirement to qualify for this death benefit. The benefit stops when the spouse remarries or dies.
Death Benefits:	Return of Employee Contributions plus interest (active and terminated only).
Vesting:	100% vesting in Employer portion of Normal Retirement Benefit at the completion of 10 years of Credited Service.
Cost of Living Adjustment:	
Eligibility:	There are three (3) retired members of the plan who are eligible for and receive Cost of Living Adjustments. There is no Cost of Living Adjustment for any other currently active or currently retired member.
Benefits:	Annual cost of living increased will be provided to eligible retired policemen in an amount equal to the smaller of: <ul style="list-style-type: none"> (1) 50% of the rate of salary increase for new policemen (2) 3%

PENSION TRUST SUMMARY - Continued

Special Buy Back:	Special provision which allowed L. Carlson, M. Fekete, J. Mooney and H. Stormer to resume employee contributions and buy back past contributions plus 5½% interest.
Military Buy Back:	MERF B type of military service buyback which allowed for the buyback of military service during the Korean and Vietnam hostilities by contributing 2% of earnings for each such year of service. In addition, another MERF B type of military service buyback which allowed for the buyback of 75% of military service which took place outside of the Korean and Vietnam hostilities by contributing 2% of earnings for each such year of credited military service.
Employee Contributions:	5% of Compensation for all members. Maximum contribution period is 30 years.

TOWN OF NEWTOWN PENSION PLAN - POLICE PERSONNEL

APPENDIX BACTUARIAL ASSUMPTIONSFUNDING METHOD

Entry Age Normal Method – This method calculates an annual normal cost for each active employee, and adds an amortization of the unfunded accrued actuarial liability for all participants. The initial funding base was re-established as of July 1, 2017 (when the funding method was changed from Projected Unit Credit), and will be amortized over 20 years. Future changes in accrued liability due to experience gains or losses, changes in assumptions, and/or plan provisions will be amortized over 10 years.

For funding purposes, change in interest rate from 7.5% to 7.0% will be phased in over three years. July 1, 2018 is the second year of the phase in and thus the Actuarially Determined Contribution is based on 33.3% of the 7.5% valuation results and 66.7% of the 7.0% valuation results.

TRUST ASSET VALUATION METHOD

Valuation assets are calculated using a smoothing formula which recognizes variances from the assumed rate of return 20% per year. For 2015 and forward, each year's loss will be separately accounted for and recognized over five years.

<u>INTEREST ASSUMPTION</u>	Pre-Retirement: 7.0% Compounded Annually
	Post-Retirement: 7.0% Compounded Annually

MORTALITY ASSUMPTION RP-2014 Society of Actuaries Blue Collar Mortality Table, with future generational increases projected with the RP-2017 scale.

TURNOVER - Based on the closure of the plan to new entrants, and the historically low termination rates of veteran police officers, no turnover has been assumed starting with the July 1, 2017 valuation.

SALARY SCALE Salaries are assumed to increase at 3% per year starting one year after the Valuation Date. For the year following the Valuation Date we use the current base compensation increased by a factor that is based on the overtime percentage earned in the prior fiscal year.

RETIREMENT AGE Participants are assumed to retire at the later of their Normal Retirement Date, or age 50. If a participant is past the date as determined above, he is assumed to retire one year after the valuation date.

COLA -Assumed to be 1.5% annually when in force.

ESTIMATED EXPENSES - Direct expenses of the trust are assumed to be \$7,000.