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December 14, 2021

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

Re: Town of Newtown Pension Plan - Selectmen and Board of Education Personnel & Elected Officials Pension Plan & Police Union Pension Plan Our File No. 2823

Dear First Selectman Rosenthal:

We are pleased to present your Annual Valuation Report as of July 1, 2021. Again this year we have separated the report into two sections, with Part I containing the general calculations and disclosures, and Part II covering the individual participants benefit data (to be completed).

For the 2022-2023 Fiscal Year of the Town, our recommended contributions are as follows:

	Recommended (2022-23)	Prior Year (2021-22)
Selectmen Police (see separate rpt.)	\$ 551,024 1,099,390	\$ 632,672
Total Town of Newtown	\$1,650,414	\$1,796,867
Board of Education:	\$ 601,197	\$ 680,222
Total all Plans:	\$2,251,611	\$2,477,089

The above amounts are based on the July 1, 2021 valuation results projected forward to be applicable to the following fiscal year, and have been calculated using a blend of 7.0% and 6.5% assumed discount rate valuations.

If the deposits are to be made substantially later than July 1, 2022, interest at 6.5% per annum should be added.

Please see the General Comments section of the valuation report for information regarding changes in the plan's contribution requirements. At the end of the report is the information on the Elected Officials Pension Plan.

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

Sincerely,

David G. Leonard, A.S.A.

Account Executive

cc: Ellen Whelan
Robert Tait

Hon. Dan Rosenthal Town of Newtown December 14, 2021 Page 2

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 the Pub-10 Public Safety" tables, with projection scale MP-2020. This represents a change from 2020 only in that the projection scale has been updated, which is an immaterial change.

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 #20-03604

Date

ANNUAL VALUATION REPORT

FOR

TOWN OF NEWTOWN PENSION PLAN POLICE DEPARTMENT PERSONNEL

AS OF JULY 1, 2021

Prepared by:

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

December 14, 2021

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I. HIGHLIGHTS

This section of the report summarizes the results of the July 1, 2021 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, 2021 <u>Valuation</u>	July 1, 2020 <u>Valuation</u>
1. Recommended Annual Contributions:*	\$1,099,390 (30.4%)	\$1,164,195 (31.2%)
2. Covered Payroll of Participants (covered earnings for the fiscal year preceding the valuation date)	\$3,614,450	\$3,727,706
3. Net Normal Cost (EAN)	\$460,652 (12.7%)	\$421,374 (11.3%)
4. Accrued Actuarial Liability (EAN)	\$28,961,203	\$27,914,498
5. Assets - Market Value (MV)	\$22,680,086	\$17,923,372
- Valuation Assets (VA)	\$20,317,504	\$18,355,819
6. Unfunded Accrued Liability (VA)	\$8,643,699	\$9,558,679
7. Actuarial Value of Benefits (total plan):		
a. Value of Vested Accrued Benefits	\$25,992,665	\$24,787,957
b. Value of Non-Vested Accrued Bens.	\$230,529	\$340,388
c. MV Assets in excess of Vested Benefits (5 minus 7a)	(\$3,312,579)	(\$6,864,585)
8. Number of Participants:		
a. Active Participants	36	37
b. Retirees, DROPs, Benef., & Alt Payees	34	33
c. Terminated Vested Participants (includes refunds only due)	3	3
d. Total	73	73

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

II. GENERAL COMMENTS

The recommended contribution produced by the July 1, 2021 valuation decreased \$64,808, to a recommended level of \$1,099,390 for the 2022-23 fiscal year.

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

2021-22 Recommendation:	\$1,164,198			
Chg in Active Norm. Cost (N.C):	\$ 47,497			
Valuation Asset (Gains)/Losses:	(154,860)			
Retiring/Term Members N.C.:	(37,892)			
Change in Assumptions	65,757			
(phased in interest rates)				
Misc. Actuarial Factors:	14,690			
Total Changes:	\$ (64,808)			
2021-22 Recommendation:	\$1,099,390			

It should be noted that the breakdown of the different factors above are estimates. The Miscellaneous Actuarial Factors represents what is left over when all the other items have been taken into account. At about 1.3% of the total recommendation, this item is relatively immaterial and is not directly traceable.

There was one terminated member with vested benefits during the year, and one prior terminated member retired. The active count thus decreased by one, with the inactives increasing by the same number – thus the total plan population did not change.

The remaining 36 active members experienced virtually no compensation increases, despite a 2% increase in base pay. Because the Police Union plan recognizes up to 25% of overtime, there can be more fluctuation in members' salaries than in the other town departments.

For July 1, 2022, the plan experienced the second year of the phase in to 6.5% interest rates. 60% of the valuation contribution was based on 7.0% valuation results, and 40% is from the 6.5% calculations.

As you can see in the table above, the increases from the phase in were significantly overshadowed by the valuation gains from a trust return of more than 25%.

Because of our smoothed valuation asset method, which recognizes 20% of asset gains each year, we can count on additional help from the 2021 trust asset performance through the 2025 annual valuation report. Coincidentally, that is the first valuation year that will fully be prepared on the 6.5% assumed interest rate.

We can thus expect the phase in to continue without increasing the annual contribution, assuming that the trust can perform close to the 6.5% assumed rate over the next few years. Additional reductions could also occur as the active population continues to decline.

The plan's market value funding ratios increased due to the strong trust asset performance, with the present value of accrued benefits measure up to 86.5% (+13.4%) and the accrued liability level increasing by 12.6% to 78.3%.

TOWN OF NEWTOWN PENSION PLAN POLICE PERSONNEL III. PLAN ASSETS

A. Summary

	07/01/2020 Beginning	Employer	Employee	Net Investment	Trust	Transfer EEs		06/30/2021 Ending
Investment	Balance	Contribs.	Contribs.	Income	Expenses	Distributions	Transfers out	Balance
ER Contrib. Receivable/(Payable)	0	0	0	0	0	0	0	0
EE Contrib. Receivable	0	0	0	0	0	0	0	0
Distribution Due PARS	0	0	0	0	0	0	0	0
Prepaid Benefits	216,269	0	0	0	0	8,595	0	224,864
<u>Comerica</u>								0
Cash	295,399	2,485,983	422,844	1,229,565	(74,656)	(2,703,122)	(1,247,818)	408,195
Investments	47,197,786	0	0	11,251,600	0	0	1,247,818	59,697,204
Accrued Interest	31,404	0	0	(31,404)	0	0	0	0
<u>PLAN TOTALS</u>	47,740,857	2,485,983	422,844	12,449,761	(74,656)	(2,694,528)	0	60,330,263
Distribution of Assets by Department								
	07/01/2020			Net		06/30/2021		06/30/2021
	Beginning	Employer	Employee	Investment		Ending		Valuation
Plan Category	Balance	Contribs.	Contribs.	Income*	Distributions	Balance		Asset Balance
G V								
Town Plan	29,675,787	1,390,665	233,180	7,667,791	(1,513,880)	37,453,543		33,552,012
Elected officials	141,699	11,639	3,861	39,435	0	196,633		N/A
Police Plan	17,923,372	1,083,679	185,803	4,667,879	(1,180,647)	22,680,086		20,317,504
Grand Total	47,740,857	2,485,983	422,844	12,375,105	(2,694,528)	60,330,263		53,869,516

^{*} Income reduced for trust expenses; allocated on a weighted basis by Comerica.

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 current 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.

This method was installed in 2015 and 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, 2021:

1. Assumed market value yield at valuation rate*	\$3,172,964
2. Actual MV Yield for June 30, 2021 **	12,410,327
3. Current Year (Gain)/Loss on Market value yield* (1) - (2)	(9,237,363)
4. Portion of Curr. Yr. Loss to be Recognized in 2021 (3) x 20%	(1,847,473)
5. Portion of Current Years (Gain)/Loss Not Recognized in 2021	(7,389,890)
6. Prior Unrec. (Gains)/ losses - June 30, 2021 - see next page	1,125,777
7. Total Unrecognized (Gains)/Losses (5) + (6)	(6,264,113)
8. Market Value of Trust Assets as of June 30, 2021	60,133,629
9. Preliminary Actuarial Value of Assets - June 30, 2021 (7)+ (8)	\$53,869,516
10. (a) 80% corridor of Market Value	48,106,903
(b) 120% corridor of Market Value	72,160,355
11. Final Actuarial Value of Assets - June 30, 2021***	\$53,869,516

The Preliminary Actuarial Value of Assets is 89.6% of the Market Value, and thus falls within the 80% to 120% corridor of actual June 30, 2021 Market Value.

The yield on Valuation Assets for the 2020-2021 Plan Year was 10.61%.

- * 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 was an immaterial receivable contribution as of the end of the fiscal year which has been included in the totals.
- *** Includes both Town Plan and Police Plan

III. PLAN ASSETS (Continued)

B. History of Valuation Assets Gains & Loss Recognition

The Valuation Asset calculation spreads out gains and losses over a five year period. As such, in any given year gains or losses from five different years are in the process of being recognized, while amounts remain unrecognized waiting for future years' calculations

The table below displays the bases in use this year, as well as reporting on the current unrecognized status of prior gains and losses, with their scheduled recognition dates.

		Recognition	Amts. recog. in	Deferred Recogniti	ion
		for 2021	Val. Asset Calc.	as of	Remaining
Initial Year	(Gain) or Loss	<u>Valuation</u>	thru 6/30/2021	June 30, 2021	<u>Years</u>
of Base	(a)	(b)	(c)	(a) - (c)	
2017	(\$1,933,632)	(\$386,726)	(\$1,933,632)	\$0	0
2018	(128,560)	(25,712)	(102,848)	(25,712)	1
2019	769,239	153,848	461,543	307,696	2
2020	1,406,323	281,265	562,529	843,794	3
2021	(9,237,363)	(1,847,473)	(1,847,473)	(7,389,890)	4
Totals		(\$1,824,798)		(\$6,264,113)	

Recognition for 2021 Valuation - a positive number indicates losses that impacted the valuation calculation this year. See below for the expected impact in future years.

Deferred recognition as of June 30, 2021 - this number is added to / (Subtracted from) the market value of the assets to determine the valuation basis.

Scheduled recognition dates for current bases in future actuarial value of assets calculations and expected unrecognized balances:

<u>R</u> 6	ecog. in Year	Exp. Unrecognized			
2022	(\$1,438,072)	(4,826,040)			
2023	(1,412,360)	(3,413,680)			
2024	(1,566,208)	(1,847,473)			
2025	(1,847,473)	0			

Note that future years' gains and losses will be added, as they are recognized, to the amounts shown in the above schedule.

IV. ANNUAL VALUATION - JULY 1, 2021

a. Calculation of Recommended Contributions

		7.0%	6.5%
1.	Gross Normal Cost		
	as of 7/1/2021	\$560,600	\$634,953
2.	Expenses	10,000	10,000
3.	Expected Employee	184,301	184,301
	Contributions		
4.	Net Normal Cost $(1+2-3)$	386,299	460,652
	as of 7/1/2021		
5.	Accrued Liability:		
	i. Active Employees	13,230,080	14,226,134
	ii. Inactive Employees	625,732	681,644
	iii. Retired Participants (includes DROP)	13,442,590	14,053,425
6.	Total Accrued Liability	\$27,298,402	\$28,961,203
7.	Valuation Assets - Smoothed Value	20,317,504	20,317,504
8.	Unfunded (overfunded)		
	Accrued Liability (6 - 7)	6,980,898	8,643,699
9.	Amortization of Unfunded		
	(Overfunded) Accd. Liability*	647,938	871,292
10.	Normal Cost plus Amortization		
	as of 7/1/2021 (4 + 9)	1,034,236	1,331,944
11.	Recommended Contribution for 2022-2023	\$978,883	\$1,280,149
	to be paid 7/01/2022 (10 adjusted for time passage**)		
12.	Blended Contribution for 2022-2023		1,099,390
	(60% at 7.0%, 40% at 6.5%)		

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

^{** 2022} adjustment takes into account the expected changes from unrec. trust asset (gains)/losses for 2021, plus normal cost changes assumed in the funding method.

IV. ANNUAL VALUATION - JULY 1, 2021

b. Summary of Funding Bases

					Mir	imum	Mir	nimum
Summary of Funding Bases	Init	ial Base	Rei	m. Bal20	Am	ort 7%	Am	ort 6.5%
Initial Base - 7/1/17	\$	9,558,679	\$	7,117,053	\$	637,905	\$	662,980
(Gain)/Loss/Amend/Changes - 2018	\$	(121,706)	\$	(114,086)	\$	(17,328)	\$	(16,564)
(Gain)/Loss/Amend/Changes - 2019	\$	570,618	\$	547,079	\$	81,243	\$	79,376
(Gain)/Loss/Amend/Changes - 2020	\$	315,588	\$	312,302	\$	41,993	\$	41,220
Assumption Changes - 2020	\$	1,635,186	\$	1,618,160	\$	-	\$	213,579
(Gain)/Loss Changes - 2021	\$	(836,809)	\$	(836,809)	\$	(95,875)	\$	(109,300)
Totals	\$	11,121,556	\$	8,643,699	\$	647,938	\$	871,292

Remaining Balances shown at 6.5%, amortizations shown at 6.5% and 7.0%.

IV. ANNUAL VALUATION - JULY 1, 2021

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

I. ACCRUED ACTUARIAL LIABILITY (7.0%)

a. Retirees/Benefic./Terminated	\$14,735,069
b. Current EmployeesI. EE Contr. & Intr.	3,353,662
II. ER Financed Vested	10,235,717
III. ER Financed Non-Vested	636,755
c. TOTALS	28,961,203
d. ASSETS - Market Value	22,680,086
e. FUNDED RATIO (7/1/2021)	78.31% - at 6.50%
f. FUNDED RATIO (7/1/2020)	65.76% - at 6.50%

⁻ These results will differ from the actual GASB disclosures, which are based on projected liabilities in order to ensure timely delivery.

II. PRESENT VALUE OF ACCRUED BENEFITS (PVAB)

a. Retirees/Benefic./Terminated	\$14,735,069
b. Current Employees	
I. EE Contr. & Intr.	3,353,662
II. ER Financed Vested	7,903,935
III. ER Financed Non-Vested	230,529
c. TOTALS	26,223,195
d. ASSETS - Market Value	22,680,086
e. FUNDED RATIO (7/1/2021)	86.49% - at 6.50%
f. FUNDED RATIO (7/1/2020)	73.05% - at 6.50%

V. HISTORY OF PLAN CONTRIBUTIONS AND LIABILITIES

Plan Year Beginning	Participa Act O		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
7/1/2000	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
7/1/2015	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%)	974,971
7/1/2019	38	35	3,736,280	25,190,605	17,239,221	7,951,384	988,509	(26.46%)	988,509
7/1/2020	37	36	3,727,706	27,914,498	17,923,372	9,991,126	1,083,679	(31.23%)	1,083,679
7/1/2021	36	37	3,614,450	28,961,203	22,680,086	6,281,117	1,164,195	(32.21%)	

^{*} 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 2021 valuation produced a Recommended Contribution of \$1,099,390 for the 2022-2023 plan year.

^{****} Beginning 7/1/2017 the Act. Liab. is calculated at 7.0%, starting 7/1/2020 it was 6.5%.

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:

	Police
	<u>Personnel</u>
Number of Active Participants as of July 1, 2020:*	37
Decreases:	
Non-Vested Terminations:	0
Vested Terminations:	(1)
Retirements (DROP Actives):	0
Deaths, Withdrawals:	<u>0</u>
Total Increases/(Decreases):	(1)
New Entrants during 2020-2021:	<u>0</u>
Net Change:	(1)
Number of Active Participants as of July 1, 2021:*	36
Also as of July 1, 2021:	
Total Vested Terminated (incl. refunds due):	3
Total Retired:**	<u>34</u>
TOTAL PARTICIPANTS:	73

^{*} Active participants include members beyond their Normal Retirement Dates.

^{**} Includes Alternate Payee, Beneficiaries and DROP participants.

APPENDIX A

PENSION TRUST SUMMARY

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

VALUATION DATE: July 1, 2021

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

D C4

2.25% of Final Average Compensation times years of Credited Service.

Benefit:

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:

- (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:

- (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).

100% vesting in Employer portion of Normal Retirement Benefit at the completion of 10 years of Credited Service.

Cost of Living Adjustment:

Vesting:

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:

- (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 $5\frac{1}{2}\%$ 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.

APPENDIX B

ACTUARIAL ASSUMPTIONS

FUNDING 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.

The July 1, 2021 Valuation was prepared using a 60%/40% weighting basis on calculations run at 7% and 6.5% interest, respectively. The percentages will be altered by 20% each of the next three years until the July 1, 2025 Valuation will be run at 6.5% only.

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.

INTEREST ASSUMPTION Pre-Retirement: 7.0%/6.5% Compounded Annually

Post-Retirement: 7.0%/6.5% Compounded Annually

Results at 6.5% are being phased in as described above.

MORTALITY ASSUMPTION Pub-10 "Public Safety" Mortality, with future generational increases projected with the MP-2019 scale. Used Previously: RP-2014 Society of Actuaries Blue Collar Mortality Table, with future generational increases projected with the MP-2019 scale.

<u>TURNOVER</u> - 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.

<u>SALARY SCALE</u> 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.

<u>RETIREMENT AGE</u> 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 \$10,000.