

14 Commerce Road • Newtown, Connecticut 06470-5508 • (800) 678-8161 • FAX (203) 426-1565

December 1, 2017

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, 2017.

For the 2018-2019 Fiscal Year of the Town, we are recommending a contribution as follows:

Recommended As of July 1, 2018:

\$974,971

While this represents a significant increase from last year, it was not unexpected due to changes in methods and assumptions that were reviewed and approved last year, and are being phased in over a three year period.

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. I look forward to presenting the report to the Pension Committee on December 11th. My direct phone line is (386)206-8932.

Sincerely,

David G. Leonard, A.S.A

Account Executive

cc: Ellen Whelan (8 copies)
Robert Tate

Enclosures



Hon. Dan Rosenthal Town of Newtown December 1, 2017 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 RP 2014 SOA Blue Collar tables with projection scale MP-2016. This represents a change from 2016 when the prior year's projection scale, MP-2015 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

12/1/17 Date

ANNUAL VALUATION REPORT

FOR

TOWN OF NEWTOWN PENSION PLAN POLICE DEPARTMENT PERSONNEL

AS OF JULY 1, 2017

Prepared by:

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

December 1, 2017



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I. HIGHLIGHTS

This section of the report summarizes the results of the July 1, 2017 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, 2017 <u>Valuation</u>		July 1, 2016 <u>Valuation</u>	
1. Recommended Annual Contributions:*	\$974,971	(25.1%)	\$814,974 (21.4%)
2. Covered Payroll of Participants (covered earnings for the fiscal year preceding the valuation date)	\$3,888,389		\$3,809,065	
3. Net Normal Cost (EAN / PUC)	\$372,653	(9.6%)	\$374,223 (9.8%)
4. Accrued Actuarial Liability (EAN / PUC)	\$23,082,423		\$19,153,240	
5. Assets - Market Value (MV)	\$15,078,119		\$13,586,528	
- Valuation Assets (VA)	\$15,851,388		\$15,569,789	
6. Unfunded Accrued Liability (VA)	\$7,231,035		\$3,583,451	
7. Actuarial Value of Benefits (total plan):				
a. Value of Vested Accrued Benefits	\$20,174,132		\$18,071,240	
b. Value of Non-Vested Accrued Bens.	\$295,807		\$549,722	
c. MV Assets in excess of Vested Benefits (5 minus 7a)	(\$5,096,013)		(\$4,484,712)	
8. Number of Participants:				
a. Active Participants	42		43	
b. Retirees, Beneficiaries, & Alternate Payes	28		27	
c. Terminated Vested Participants (includes refunds only due)	4		5	
d. Total	74	<u> </u>	75	

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

II. GENERAL COMMENTS

The recommended contribution produced by the July 1, 2017 valuation increased \$159,997, to a recommended level of \$974,971 for the 2017-18 fiscal year.

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

Reduction in Discount Period: Excess Salary Increases: Valuation Asset Losses: Adjusted Asset Allocation: New Members:	\$ 39,543 22,595 60,093 34,492
Terminated Members: Misc. Actuarial Factors:	0 4,370
Subtotal of changes based on prior method and assumptions:	\$161,093
Change in Funding Method Change in Assumptions (phased in interest rates)	\$ (64,639) 53,926
Adjustment for Fiscal Year Calc.	9,617

Total Changes: \$159,997

There were several changes made this year. As explored and approved last Spring in a series of studies and meetings, we have changed the funding method from Projected Unit Credit (PUC) to Entry Age Normal (EAN), and also are in the process of phasing in a 7% interest rate assumption over a three year period.

As we note on page 6, if the 7% rate was adopted immediately, the recommended contribution for 2018-19 would have been \$1,087,597, or \$112,000 more than the phased in amount. You can look forward to two more years of "planned" increases as the phase in is completed for the 2020-21 Fiscal Year's recommendation.

For the Police Plan only, the change in method actually produced a decrease in projected costs. This is both a reflection of the maturity of the plan – as the PUC method weights normal costs towards the latter end of careers – and the extension of the amortization period upon transition to 20 years, from the prior 15. When combined with the change in interest rates (as phased in), the net effect on the Police Plan's Recommended Contribution for next year was slightly negative. As mentioned above, as the phasing in of 7% continues we can expect increases for two more years from the change.

One of the uptakes from the above commentary about the changes made for this year's valuation is that the increase in contribution for next year is actually a result of the Police Plan's actuarial experience, and not the changes in method and assumptions.

II. GENERAL COMMENTS

As indicated in the table on page 2, losses on the actuarial value of trust assets were a major contributor to the increase for the year. The smoothed valuation asset yield was 3.89%, while our assumed rate of return remained at 7.5% (for the last time).

You will note that the market value return of the trust for the year was excellent, 13.30%, measured by the GASB weighted method.

Even so, the deferred losses over the last two year that are being recognized at a rate of 20% annually were too much for this year's gains to overcome. This is especially true since this year's actuarial gain, \$1,982,777, is also being recognized over five (5) years.

The unrecognized asset losses as of June 30, 2017 equal \$2,044,420, a decrease of more than \$3 million from 2016. (Note all gain/loss and deferral figures are plan wide, including the Town Plan).

About half of the \$2.0m deferral will be recognized in next year's valuation, with about 40% of that being attributed to the Police Plan. Such gains or losses are then amortized over ten (10) years as part of the funding method. If there are further gains – against the new 7.0% assumed return – they will help lower the impact of the asset losses on the following year's Recommended Contribution.

On the table there is a cost change factor of \$34,492 that is from an internal transfer of assets that stems from a misallocation of benefit payments for a Police retiree. This is an accounting change only – the officer in question has received the correct pension all along, however we had charged the Board of Education's asset base for his payments, rather than the Police plan. This was discovered this year thanks to having to balance the new Wells Fargo sub-account reports, and is in the process of being fixed at Wells Fargo for past payments.

The other plan experience changes added a total of about \$62,000 to the contribution recommendation. Most of that increase is from the natural progression of active participants aging and a 7.3% increase in recognized Police salaries. While the basic payscale is only increasing by 2.25%, the Police plan allows for a limited amount of overtime to be included in the pension calculations. Since it is limited, we do not expect further increases from this factor, but rather an ebb and flow that could reverse the effects of including overtime in some years.

The plan's funding ratio on accrued benefits, using a 7% discount factor and market value assets, increased by 0.7% from 73% to a little less than 74%. We would have expected a greater increase given the strong trust asset performance, however losses from longevity of retirees as well as the salary increases mentioned above served to hold down any meaningful progress of this funding measure.

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 PENSONNEL III. PLAN ASSETS

A. Summary

Investment	07/01/2016 Beginning Balance	Employer Contribs.	Employee Contribs.	Net Investment Income	Trust Expenses	Transfer EEs Distributions	Transfers out	06/30/2017 Ending Balance
ER Contrib. Receivable/(Payable)	0	0	0	0	0	0	0	0
EE Contrib. Receivable	0	0	14,126	0	0	0	0	14,126
Distribution Due PARS	0	0	0	42	0	0	0	42
Prepaid Benefits	153,567	0	0	0	0	24,763	0	178,330
Wells Fargo / Westport Resources								0
Cash	11,593,779	1,698,377	478,069	1,163,504	(186,364)	(1,932,480)	(12,113,703)	701,182
Investments	22,975,373	0	0	3,673,009	0	0	12,113,703	38,762,085
Accrued Interest	137,642	0	0	(19,194)	0	0	0	118,448
PLAN TOTALS	34,860,361	1,698,377	492,195	4,817,361	(186,364)	(1,907,717)	0	39,774,214
Distribution of Assets by Department	07/01/2016	Employer	Employee	Net Investment		06/30/2017		06/30/2017

	07/01/2016			Net		06/30/2017	06/30/2017
	Beginning	Employer	Employee	Investment		Ending	Valuation
Plan Category	Balance	Contribs.	Contribs.	Income	Distributions*	Balance	Asset Balance
Town Plan	21,458,800	1,001,870	289,493	2,811,782	(1,012,351)	24,549,593	25,816,266
Elected officials	119,495	10,563	3,956	16,966	0	150,979	N/A
Police Plan	13,282,067	685,944	198,747	1,802,249	(895,365)	15,073,641	15,851,388
Grand Total	34,860,361	1,698,377	492,195	4,630,997	(1,907,717)	39,774,214	41,667,654

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

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 July 1, 2017:

1. Assumed market value yield at valuation rate*	\$2,631,255				
2. Actual MV Yield for June 30, 2017 **	4,614,032				
3. Current Year (Gain)/Loss on Market value yield* (1) - (2)	(1,982,777)				
4. Portion of Curr. Yr. Loss to be Recognized in 2017 (3) x 20%	(396,555)				
5. Portion of Current Years (Gain)/Loss Not Recognized in 2017	(1,586,221)				
6. Prior Unrec. (Gains)/ losses - June 30, 2017 - see next page	3,630,642				
7. Total Unrecognized (Gains)/Losses (5) + (6) 2,044,420					
8. Market Value of Trust Assets as of June 30, 2017 39,623,234					
9. Preliminary Actuarial Value of Assets - June 30, 2017 (7)+ (8)	\$41,667,654				
10. (a) 80% corridor of Market Value	31,698,587				
(b) 120% corridor of Market Value	47,547,881				
11. Final Actuarial Value of Assets - June 30, 2017***	\$41,667,654				

The Preliminary Actuarial Value of Assets is 105.2% of the Market Value, and thus falls within the 80% to 120% corridor of actual June 30, 2017 Market Value.

The yield on Valuation Assets for the 2016-2017 Plan Year was 3.89%.

- * 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

III. PLAN ASSETS (Continued)

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

Smoothed Valuation Asset Calculation

Simoothed Valuation Asset Calculation	Transition Year <u>07/01/2014</u>	06/30/2015	06/30/2016	06/30/2017	06/30/2018	06/30/2019	06/30/2020
Actuarial Value of Assets Market Value of Assets	\$36,445,798 34,676,083	35,698,524	34,740,866	39,623,234			
Unrecognized (G)/L	1,769,715						
Recognized in Year (for 6/30/15)	(442,429)						
Expected Earnings at Market Value (7.50%)* Actual Earnings MV Actuarial (Gain)/Loss on MV		2,662,813 977,145 1,685,668	2,730,057 (1,017,424) 3,747,481	2,631,255 4,614,032 (1,982,777)			
Recognition of current years (Gain)/Loss		(337,134)	(749,496)	396,555			
Anticipated Unrecognized (Gain)/Loss for Future Years	<u>5</u>						
Remaining Unrecognized (G)/L - 7/1/14 Trans. Remaining Unrecognized (G)/L - 6/30/15 (G)/L Remaining Unrecognized (G)/L - 6/30/16 (G)/L Remaining Unrecognized (G)/L - 6/30/17 (G)/L Remaining Unrecognized (G)/L - 6/30/18 (G)/L Remaining Unrecognized (G)/L - 6/30/19 (G)/L	_	1,327,286 1,348,534	1,061,829 1,011,401 2,997,985	707,886 674,267 2,248,489 (1,586,221)	353,943 337,134 1,498,992 (1,189,666) 0	0 0 749,496 (793,111) 0 0	0 0 0 (396,555) 0
Total Unrecognized (Gains)/Losses		2,675,820	5,071,214	2,044,420	1,000,403	(43,614)	(396,555)
Market Value of Assets - EOY Total Unrecognized (Gain)/Loss Actuarial Value of Assets - EOY	١٥	35,698,524 2,675,820 \$38,374,344	34,740,866 5,071,214 \$39,812,081	39,623,234 2,044,420 \$41,667,654	г		

^{*} Calculated using weighted contributions - ER by date, EE at 50%, Distrib at 50%

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.

IV. ANNUAL VALUATION - JULY 1, 2017

a. Calculation of Recommended Contributions

		7.5%	7.0%	Difference
1.	Gross Normal Cost as of 7/1/2017	\$496,671	\$559,648	\$62,976
	us 01 //1/2017		,	Ψ02,970
2.	Expenses	7,000	7,000	
3.	Expected Employee Contributions	193,995	193,995	
4.	Net Normal Cost (1 + 2 - 3) as of 7/1/2017	309,676	372,653	\$62,976
5.	Accrued Liability:			
	i. Active Employees	11,046,120	11,862,094	815,974
	ii. Inactive Employees	698,005	751,359	53,354
	iii. Retired Participants	10,010,091	10,468,969	458,878
6.	Total Accrued Liability	\$21,754,217	\$23,082,423	\$1,328,206
7.	Valuation Assets - Smoothed Value	15,851,388	15,851,388	
8.	Unfunded (overfunded) Accrued Liability (6 - 7)	5,902,829	7,231,035	\$1,328,206
9.	Amortization of Unfunded (Overfunded) Accd. Liability*	538,625	637,905	\$99,281
10.	Normal Cost plus Amortization as of $7/1/2017$ (4 + 9)	848,301	1,010,558	\$162,257
11.	Recommended Contribution for 2018-2019 to be paid 7/01/2017 (10 adjusted for interest**)	\$918,673	\$1,087,597	\$168,923
12.	Blended Recommended Contribution	\$974,	971	

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

Blended: 2/3 (7.5%) + 1/3 (7.0%)

^{**} Interest adjustment takes into account the expected timing of plan deposits, including employee contributions.

IV. ANNUAL VALUATION - JULY 1, 2017

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

I. ACCRUED ACTUARIAL LIABILITY (7.0%)

a. Retirees/Benefic./Terminated	\$11,220,328
b. Current Employees	
I. EE Contr. & Intr.	2,828,191
II. ER Financed Vested	7,611,367
III. ER Financed Non-Vested	1,422,537
c. TOTALS	23,082,423
d. ASSETS - Market Value	15,078,119
e. FUNDED RATIO (7/1/2017)	65.32% - at 7.00%
f. FUNDED RATIO (7/1/2016)	65.10% - at 7.50%

⁻ 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./Terminatedb. Current Employees	\$11,220,328
I. EE Contr. & Intr.	2,828,191
II. ER Financed Vested	6,125,613
III. ER Financed Non-Vested	295,807
c. TOTALS	20,469,939
d. ASSETS - Market Value	15,078,119
e. FUNDED RATIO (7/1/2017)	73.66% - at 7%
f. FUNDED RATIO (7/1/2016)	72.96% - at 7%

V. HISTORY OF PLAN CONTRIBUTIONS AND LIABILITIES

Plan Year Beginning	Particip Act C		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
7/1/2013	45	24	3,827,046	15,470,719	11,977,460	3,493,259	548,620	(14.34%)	473,728
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%)	

^{*} 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 2017 valuation produced a Recommended Contribution of \$974,971 for the 2018-2019 plan

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

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, 2016:*	43
Decreases:	
Non-Vested Terminations:	0
Vested Terminations:	0
Retirements:	(1)
Deaths, Withdrawals:	<u>0</u>
Total Increases/(Decreases):	(1)
New Entrants during 2016-2017:	<u>0</u>
Net Change:	(1)
Number of Active Participants as of July 1, 2017:*	42
Also as of July 1, 2017:	
Total Vested Terminated (incl. refunds due):	4
Total Retired:**	<u>28</u>
TOTAL PARTICIPANTS:	74

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

^{**} Includes Alternate Payee

APPENDIX A

PENSION TRUST SUMMARY

PLAN SPONSOR: Town of Newtown

EFFECTIVE DATE: July 1, 1965

ANNIVERSARY DATE: July 1 of each year.

July 1, 2017 VALUATION DATE:

DEFINITIONS

Total compensation limited each year to 125% of base compensation. Compensation:

Final Average Compensation includes the participants highest 36 consecutive months.

Participation: Eligibility -Service: 6 Months

> Maximum Age: 60

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.

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

Normal Retirement

Benefit:

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



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).

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:

amount equal to the smaller on

- (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 51/2% 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.

For funding purposes, change in interest rate from 7.5% to 7.0% will be phased in over three years. July 1, 2017 is the first year of the phase in and thus the Actuarially Determined Contribution is based on 66.7% of the 7.5% valuation results and 33.3% 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-2016 scale.

<u>TURNOVER</u> Participants are assumed to terminate at the following rates:

<u>Age</u>	<u>% Term.</u>
25	5%
30	4%
35	3%
40	2%
45	1%
50	0%

<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.

<u>COLA</u> -Assumed to be 1.5% annually when in force.

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

