Town of Monroe

2016-2017

PROPOSED ANNUAL BUDGET
WORKBOOK INFORMATION

PENSIONS

DRAFT July 1, 2014 Actuarial Valuation Results - Town

Actuarially Determined Contribution (ADC)	7/1/2012	7/1/2014 No Changes	7/1/2014 Updated Mortality	7/1/2014 Updated Mortality + 7.0% LTROR
1. Total Normal Cost	$248,208	$285,604	$297,823	$331,191
2. Administration expenses	18,000	18,000	18,000	18,000
3. Expected employee contributions	107,063	136,226	136,226	136,226
4. Employer normal cost: (1) + (2) - (3)	$159,145	$167,378	$179,597	$212,965
as a % of payroll	*5.23%*	*4.87%*	*5.22%*	*6.19%*
5. Actuarial accrued liability	9,598,303	10,513,283	11,047,132	11,691,006
6a. Market value of assets	7,370,492	9,769,997	9,769,997	9,769,997
6b. Actuarial value of assets	7,486,638	8,904,632	8,904,632	8,904,632
Funded Ratio (6b /5)	*78.0%*	*84.7%*	*80.6%*	*76.2%*
7. Unfunded actuarial accrued liability: (5) - (6b)	2,111,665	1,608,651	2,142,500	2,786,374
8. Payment on unfunded actuarial accrued liability*	222,535	169,525	195,500	245,807
9. Total contribution for Valuation Year: [(4) + (8)]	$381,679	$336,903	$375,097	$458,772
11. ADC for Valuation Year Plus 1 2013/2014	**$388,045**	**$343,598**	**$382,281**	**$467,291**
13. ADC for Valuation Year Plus 2 2014/2015	**$394,666**	**$350,561**	**$389,752**	**$476,150**

* *The amortization period is 15 years as of 7/1/2012 and for the the No Changes Scenario, 20 years for other 2014 Scenarios.*

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Retirement Plan for Town and Board of Education Employees of the Town of Monroe

Actuarial Valuation Report for Cash Contribution Purposes

July 1, 2014

Timothy A. Ryor
Senior Vice President and
Consulting Actuary

Kim Thayer
Actuarial Analyst

March 27, 2015

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Certification

This report presents the results of the July 1, 2014 Actuarial Valuation for the Retirement Plan for Town and Board of Education Employees of the Town of Monroe (the Plan) for the purpose of estimating the funded status of the Plan and determining the Actuarially Determined Contribution (ADC) for the fiscal years ending June 30, 2016 and June 30, 2017. This report is intended to satisfy the requirements of Connecticut General Statute 7-450a. This report may not be appropriate for any other purpose.

The valuation has been performed in accordance with generally accepted actuarial principles and practices. It is intended to comply with all applicable Actuarial Standards of Practice.

I certify that the actuarial assumptions and methods that were selected by me and represent my best estimate of anticipated actuarial experience under the Plan.

In preparing this valuation, I have relied on employee data provided by the Plan Sponsor, and on asset and contribution information provided by the Trustee. I have audited neither the employee data nor the financial information, although I have reviewed them for reasonableness.

The results in this valuation report are based on the Plan as summarized in the *Plan Provisions* section of this report and the actuarial assumptions and methods detailed in the *Description of Actuarial Methods and Assumptions* section of this report.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as: plan experience differing from that anticipated by the economic or demographic assumptions; 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. Due to the limited scope of this report, an analysis of the potential range of such future measurements has not been performed.

I am a member of the American Academy of Actuaries and meet its Qualification Standards to render the actuarial opinion contained herein.

Timothy A. Ryor, FSPA, FCA, MAAA, Enrolled Actuary
14-05126

March 27, 2015

Introduction

Purpose of the Valuation

The purpose of the valuation is to determine the range of cash contributions for the plan year.

The ultimate cost of a pension plan is based primarily on the level of benefits promised by the plan. The pension fund's investment earnings serve to reduce the cost of plan benefits and expenses. Thus,

ultimate cost	=	*benefits paid*	+	*expenses incurred*	-	*investment return*	-	*employee contributions*

The actuarial cost method distributes this ultimate cost over the working lifetime of current plan participants. By means of this budgeting process, costs are allocated to both past and future years, and a cost is assigned to the current year. The current year's allocated cost, or normal cost, is the building block upon which the range of annual cash contributions is developed.

Information Available in the Valuation Report

The Valuation Highlights and Executive Summary are intended to emphasize the notable results of the valuation from the perspective of the Plan Sponsor. Supporting technical detail is documented in Valuation Exhibits and Actuarial Basis. A concise summary of the principal provisions of the Plan is outlined in Plan Provisions.

Valuation Highlights (Town)

	January 1, 2014	July 1, 2012
Number of participants		
Active	67	59
Terminated vested	25	14
Retired and beneficiaries	43	45
Return on contributions	0	3
Total	135	121
Covered payroll	$3,439,025	$3,044,942
Average plan salary	51,329	51,609
Actuarial present value of future benefits	13,168,196	11,592,000
Actuarial accrued liability (EAN Basis)	11,047,132	9,598,303
Asset Value		
Market Value	9,769,997	7,370,492
Actuarial Value	8,904,632	7,486,638
Normal cost (including expenses)	179,597	159,145
Actuarially Determined Contribution (ADC)		
ADC for Valuation Year Plus 1: 6/30/16	382,281	388,045
ADC for Valuation Year Plus 2: 6/30/17	389,752	394,666
Funding Percent		
Market	88.4%	76.8%
Actuarial	80.6%	78.0%

Valuation Highlights (Board of Education)

	January 1, 2014	July 1, 2012
Number of participants		
Active	89	88
Terminated vested	23	19
Retired and beneficiaries	48	52
Return on contribution	0	17
Total	160	176
Covered payroll	$4,264,439	$4,268,569
Average plan salary	47,915	48,506
Actuarial present value of future benefits	14,393,398	13,494,747
Actuarial accrued liability (EAN Basis)	11,741,546	10,626,487
Asset Value		
Market Value	10,022,355	7,946,571
Actuarial Value	10,015,497	8,994,081
Normal cost (including expenses)	210,734	170,664
Actuarially Determined Contribution (ADC)		
ADC for Valuation Year Plus 1:	376,663	349,519
ADC for Valuation Year Plus 2: 6/30/17	385,429	356,619
Funding Percent		
Market	85.4%	74.8%
Actuarial	85.3%	84.6%

Executive Summary

Actuarially Determined Contribution (ADC) for 2015-2016

The actuarial valuation as of July 1, 2014 produces the contribution for the 2014 Plan Year and determines the Actuarially Determined Contribution (ADC) for the 2015 and 2016 fiscal year. The actuarially calculated contribution payable for the Town of Monroe follows:

Town

	January 1, 2014	July 1, 2012
ADC for Valuation Year plus 1:	$382,281	$388,045
ADC for Valuation Year plus 2:	389,752	394,666

Board of Education

	January 1, 2014	July 1, 2012
ADC for Valuation Year plus 1:	$376,663	$349,519
ADC for Valuation Year plus 2:	385,429	356,619

Changes Reflected in the Valuation

- The mortality table was changed to RP-2014 Mortality table in 2014 plan year and the unfunded liability was amortized over 20 years.

Exhibit A

Participant Data (Town)

ACTIVE MEMBERS

	Active	Terminated Vested	Retired	ROC	Total
Active Members, 1-1-2012	59	14	45	3	121
Adjustment	0	+8	+1	-3	+6
Retirements	-1	0	+1	0	0
Terminations					
Vested	-3	+3	N/A		0
Vested (took Lump Sum)	-1	0	N/A		-1
Non Vested Term	0	0	N/A	0	0
Deaths					
Without death benefit	0	0	-4	0	-4
With death benefit	0	0	-1	0	-1
New Beneficiary	0	N/A	+1	0	+1
New Members	+13	N/A	0	0	+13
Return to Active	0	0	0	0	0
Active Members, 7-1-2014	**67**	**25**	**43**	**0**	**135**

Participant Data (Board of Education)

ACTIVE MEMBERS

	Active	Terminated Vested	Retired	ROC	Total
Active Members, 1-1-2012	88	19	52	17	176
Adjustment	0	+8	0	-11	-3
Retirements	-4	-4	+9	-1	0
Terminations					
Vested	-3	+3	N/A	0	0
Vested (took Lump Sum)	-3	-2	N/A	-5	-10
Deaths					
Without death benefit	0	-1	-13	0	-14
With death benefit	0	0	-1	0	-1
New Beneficiary	0	N/A	+1	0	+1
New Members	+11	N/A	0	0	+11
Return to Active	0	0	0	0	0
Active Members, 7-1-2014	**89**	**23**	**48**	**0**	**160**

Exhibit B

Development of Asset Values

The Actuarial Value of assets is used in the determination of plan contributions. It is determined by adding or subtracting 20% of the difference between the actual and expected asset value to the expected value. The Actuarial Value is constrained to be within 70% to 130% of Market Value.

Town

Actuarial Value of Assets	7/1/2012	7/1/2013
1. Actuarial Value of Assets at beginning of year	7,529,785	8,124,013
2. Employee and employer contributions	429,334	479,137
3. Total benefit payments and expenses	503,127	522,533
4. Average asset value: (1) + 0.5 x [(2) - (3)]	7,492,888	8,102,315
5. Expected investment income: 0.075 x (4)	561,967	607,674
6. Expected end of year assets: (1) + (2) - (3) + (5)	8,017,958	8,688,291
7. Actual end of year assets	8,548,231	9,769,997
8. Adjustment toward market value: 20% x [(7) - (6)]	106,055	216,341
9. Actuarial smoothed return: (5) + (8)	668,021	824,015
10. Preliminary end of year assets (smoothed): (6) + (8)	8,124,013	8,904,632
11. Preliminary actuarial value as a percentage of market value: (10) / (7)	95.04%	91.14%
12. Adjustment to be within 20% corridor around market value: (10) - 120% x (7)	0	0
13. End of year assets (smoothed): (10) + (12)	8,124,013	8,904,632
14. Actuarial value as a percentage of market value: (13) / (7)	95.04%	91.14%

Board of Education

Actuarial Value of Assets	7/1/2012	7/1/2013
1. Actuarial Value of Assets at beginning of year	8,994,081	9,358,718
2. Employee and employer contributions	560,805	547,552
3. Total benefit payments and expenses	643,986	592,699
4. Average asset value: (1) + 0.5 x [(2) - (3)]	8,952,490	9,336,145
5. Expected investment income: 0.075 x (4)	671,437	700,211
6. Expected end of year assets: (1) + (2) - (3) + (5)	9,582,337	10,013,782
7. Actual end of year assets	8,464,243	10,022,355
8. Adjustment toward market value: 20% x [(7) - (6)]	(223,619)	1,715
9. Actuarial smoothed return: (5) + (8)	447,818	701,925
10. Preliminary end of year assets (smoothed): (6) + (8)	9,358,718	10,015,497
11. Preliminary actuarial value as a percentage of market value: (10) / (7)	110.57%	99.93%
12. Adjustment to be within 20% corridor around market value: (10) - 130% x (7)	0	0
13. End of year assets (smoothed): (10) + (12)	9,358,718	10,015,497
14. Actuarial value as a percentage of market value: (13) / (7)	110.57%	99.93%

Exhibit C

Actuarial Balance Sheet As of July 1, 2014

Town

	Actives	Terminated Vested	Retired	ROC	Total
Actuarial Present Value of Future Benefits	8,509,617	752,727	3,905,852	-	13,168,196
Accrued Liability (Entry Age Normal)	6,388,553	752,727	3,905,852	-	11,047,132
Actuarial Value of Assets	4,246,053	752,727	3,905,852	-	8,904,632
Unfunded Accrued Liability	2,142,500	-	-	-	2,142,500

Board of Education

	Actives	Terminated Vested	Retired	ROC	Total
Actuarial Present Value of Future Benefits	10,694,292	348,430	3,896,676	-	14,939,398
Accrued Liability (Entry Age Normal)	7,496,440	348,430	3,896,676	-	11,741,546
Actuarial Value of Assets	5,770,391	348,430	3,896,676	-	10,015,497
Unfunded Accrued Liability	1,726,049	-	-	-	1,726,049

Exhibit D

Development of Unfunded Actuarial Accrued Liability As of July 1, 2014

Town

	Actives	Terminated Vested	Retired	ROC	Total
1. Total Accrued Liability (AL) *(Entry Age Normal Method)*	$ 6,388,553	$ 752,727	$ 3,905,852	$ -	$ 11,047,132
2. Actuarial Value of Assets	4,246,053	752,727	3,905,852	-	8,904,632
3. Unfunded Accrued Liability (UAL)	2,142,500	-	-	-	2,142,500
4. Amortization of UAL at 7.5%	195,500	-	-	-	195,500

Board of Education

	Actives	Terminated Vested	Retired	ROC	Total
1. Total Accrued Liability (AL) *(Entry Age Normal Method)*	$ 7,496,440	$ 348,430	$ 3,896,676	$ -	$ 11,741,546
2. Actuarial Value of Assets	5,770,391	348,430	3,896,676	-	10,015,497
3. Unfunded Accrued Liability (UAL)	1,726,049	-	-	-	1,726,049
4. Amortization of UAL at 7.5%	157,499	-	-	-	157,499

Exhibit E

Development of Normal Cost and Actuarially Determined Contribution
As of July 1, 2014 (Town)

Actuarially Determined Contribution (ADC)	7/1/2014	7/1/2012
1. Total Normal Cost	297,823	248,208
2. Administration expenses	18,000	18,000
3. Expected employee contributions	136,226	107,063
4. Employer normal cost: (1) + (2) - (3)	179,597	159,145
as a % of payroll	*5.22%*	*5.23%*
5. Actuarial accrued liability	11,047,132	9,598,303
6a. Market value of assets	9,769,997	7,370,492
6b. Actuarial value of assets	8,904,632	7,486,638
Funded Ratio (6b /5)	*80.6%*	*78.0%*
7. Unfunded actuarial accrued liability: (5) - (6b)	2,142,500	2,111,665
8. Payment on unfunded actuarial accrued liability*	195,500	222,535
9. Total contribution for Valuation Year: [(4) + (8)]	375,097	381,680
10. ADC for Valuation Year Plus 1	382,281	388,046
11. ADC for Valuation Year Plus 2	389,752	394,666

* *The amortization period is 15 years as of 7/1/2012 and 20 years as of 7/1/2014.*

Exhibit E
Continued

Development of Normal Cost and Actuarially Determined Contribution
As of July 1, 2014 (Board of Education)

Actuarially Determined Contribution (ADC)	**7/1/2014**	**7/1/2012**
1. Total Normal Cost	393,295	353,421
2. Administration expenses	20,000	20,000
3. Expected employee contributions	202,561	202,757
4. Employer normal cost: (1) + (2) - (3)	210,734	170,664
as a % of payroll	*4.94%*	*4.00%*
5. Actuarial accrued liability	11,741,546	10,626,487
6a. Market value of assets	10,022,355	7,946,571
6b. Actuarial value of assets	10,015,497	8,994,081
Funded Ratio (6b /5)	*85.3%*	*84.6%*
7. Unfunded actuarial accrued liability: (5) - (6b)	1,726,049	1,632,406
8. Payment on unfunded actuarial accrued liability*	157,499	172,029
9. Total contribution for Valuation Year: [(4) + (8)]	368,233	342,693
10. ADC for Valuation Year Plus 1	376,663	349,520
11. ADC for Valuation Year Plus 2	385,429	356,619

** The amortization period is 15 years as of 7/1/2012 and 20 years as of 7/1/2014.*

Description of Actuarial Methods and Assumptions

Town and Board of Education

Asset Valuation Method

The Actuarial Value of assets used in the development of plan contributions is equal to the Expected Asset Value plus or minus 20% of the difference between the Expected Value and the Market Value of Assets. The Actuarial Value will also fall within the range of 70% to 130% of the Market Value of Assets.

Actuarial Cost Method

Description of Current Actuarial Cost Method:

Basic cost method: Entry Age Actuarial Cost Method (level percentage of salary).

Under this method, the normal cost is the sum of the individual normal costs for all active participants. For an active participant, the normal cost is the participant's normal cost accrual rate, multiplied by the participant's current compensation. The normal cost accrual rate equals the present value of future benefits for the participant, determined as of the participant's entry age, divided by the present value of the compensation expected to be paid to the participant for each year of the participant's anticipated future service, determined as of the participant's entry age.

Unfunded Accrued Liability

A participant's accrued liability equals the present value, at the participant's attained age, of future benefits less, the present value at the participant's attained age of the individual normal costs payable in the future. A beneficiary's accrued liability equals the present value, at the beneficiary's attained age, of future benefits. The unfunded accrued liability equals the total accrued liability less the actuarial value of assets.

The entry age used for each active participant is the participant's age at the time he or she would have commenced participation if the plan had always been in existence under current terms, or the age as of which he or she first earns service credits for purposes of benefit accrual under the current terms of the plan.

The total unfunded accrued liability (Actuarial Accrued Liability less Actuarial Value of Assets) is amortized over 20 years as of July 1, 2014.

Description of Actuarial Methods and Assumptions

Town

Investment return	
Valuation	
Pre-retirement	7.5% per year.
Post-retirement	7.5% per year.
Salary increases	
For determination of benefits	4.0%.
Entry date	
Retirement age	Age 65.
Mortality	RP-2014 Mortality Table with no collar adjustment projected to valuation date with Scale MP-2014. Prior Valuation: RP-2000 Mortality Table with separate male and female rates, with no collar adjustment, combined table for non-annuitants and annuitants, projected to the valuation date with Scale AA.
Mortality improvement	Projected to date of decrement using Scale MP-2014 (generational mortality). Prior Valuation: Projected to date of decrement using Scale AA (generational mortality).
Termination prior to retirement	Sample Termination Rates

Age	
20	0.08%
25	0.08
30	0.07
35	0.06
40	0.05
45	0.04
>=50	0.00

Cost of living adjustment	
Retirees	None.
Actives	None.
Expenses	$18,000 per year.
Percent of married	85% male. 75% female.
Spouse's Age	Females(or males) are assumed to be the same age as their spouses.
Disability costs	None.
Changes in methods and assumptions as of July 1, 2014	Mortality table was changed to RP-2014 Generational Mortality table. Unfunded liability was amortized over a 20-year period as of July 1, 2015 (previously 15).

Description of Actuarial Methods and Assumptions

Board of Education

Mortality	RP-2014 Mortality Table with no collar adjustment projected to valuation date with Scale MP-2014. Prior Valuation: RP-2000 Mortality Table with separate male and female rates, with no collar adjustment, combined table for non-annuitants and annuitants, projected to the valuation date with Scale AA.
Mortality improvement	Projected to date of decrement using Scale MP-2014 (generational mortality). Prior Valuation: Projected to date of decrement using Scale AA (generational mortality).
Termination prior to retirement	Sample Termination Rates

Age	
20	0.08%
25	0.08
30	0.07
35	0.06
40	0.05
45	0.04
>=50	0.00

Retirement Age	65.
Percent Married	85% male, 75% female.
Age of Spouse	Females (or males) are the same age as their spouses.
Net Investment Return	7.50%.

Salary Increases	4.00%.
Credited Interest on Employee Contributions	5.00% assumed for all future years – prior to 1988.
Administrative Expenses	$20,000 per year.
Changes in methods and assumptions as of July 1, 2014	Mortality table was changed to RP-2014 Generational Mortality table. Unfunded liability was amortized over a 20-year period as of July 1, 2015 (previously 15).

Plan Provisions

Town

This summary is being provided for valuation purposes only. This summary outlines the major features of the Plan. It does not give full details or cover all aspects of the Plan. The actual terms and conditions of the Plan are stated in the formal Plan document.

Effective date	
Original	July 1, 1970.
Latest amendment	July 1, 2002
Plan year	July 1 through June 30.
Normal Retirement	
Age Requirement	65.
Service Requirement	5 years.
Amount	Highway Employees: 1.625% of final average earnings per year of service to a maximum of 35 years. Clerical and Non-Union: 1.75% of final average earnings per year of service to a maximum of 35 years. Supervisors: 1.75% of final average earnings per year of service to a maximum of 35 years. Final average earnings is defined as the highest average annual Earnings received during the sixty (60) consecutive months out of the last 120 calendar months before Retirement Date, or the
Early Retirement	
Age Requirement	55.
Service Requirement	15 years.
Amount	Normal pension accrued, actuarially reduced for each month of age less than 65.

Supplemental Benefit for Town Clerical Unit Employees

Age Requirement	62.
Service Requirement	20 continuous years.
Amount	$200 per month payable for life of retiree. Benefit is not available as part of any pre-retirement or post-retirement spouse benefit, death benefit, optional form or modified cash refund.
Employee Contribution	1% of basic pay (in addition to any other required contribution).

Vesting

Age Requirement	None.
Service Requirement	5 years.
Amount	Normal pension accrued, payable at normal or early retirement (if eligible).
Normal Retirement Age	65.
Amount	Return of contribution with interest if not vested. The contributions for the supplemental $200 monthly benefit are not eligible to be returned.

Spouse's Pre-Retirement Death Benefit

Requirement	Eligible for normal or early retirement.
Amount	100% of benefit employee would have received had he or she retired the day before death and elected the 100% joint and survivor option.

Post-Retirement Death Benefit

Lump sum benefit	100% of contributions made by the employee, less total benefits paid to the pensioner. (Excludes any amount contributed by the employee for the Supplemental Benefit.)

Employee Contribution Rate	Highway Employees: 3.00% of basic annual earnings. Clerical, Non-Union and Supervisors: 3.85% of basic annual earnings. Contributions earn interest at 5%.
Group Covered	Employees of the Town of Monroe.
Changes in Plan Provisions	There have been no changes in plan provisions since the last valuation.

Plan Provisions

Board of Education

This summary is being provided for valuation purposes only. This summary outlines the major features of the Plan. It does not give full details or cover all aspects of the Plan. The actual terms and conditions of the Plan are stated in the formal Plan document.

Plan year	January 1 through December 31.
Normal Retirement	
Age Requirement	65.
Service Requirement	5 years.
Amount	1.75% of Final Average Earnings per year of Credited Service to a maximum of 35 years. For participants that terminated before July 1, 2001, the benefit multiplier is 1.5% for service through July 1, 1996 and 1.625% thereafter. Final Average Earnings is defined as the average of the highest 60 consecutive months of basic annual contractual pay out of the last 120 months immediately preceding retirement.
Early Retirement	
Age Requirement	55.
Service Requirement	15 years.
Amount	Normal pension accrued, reduced 0.6% for each of the first 60 months and 0.3% for the remaining number of months that retirement occurs before age 65.

Vesting	
Age Requirement	None.
Service Requirement	5 years.
Amount	Normal pension accrued, payable at normal retirement. If Service ceases by reason other than death prior to Retirement Date, participant may elect at any time prior to or on Retirement Date to receive a refund of Participant contributions together with Credited Interest computed thereon to the date the election is made. Upon election of such refund, the Participant will forfeit the Accrued Benefit.
Spouse's Pre-Retirement Death Benefit	
Requirement	Eligible for early retirement.
Amount	100% of benefit employee would have received if retired the day before death, having elected the 100% joint and survivor option.
Post-Retirement Death Benefit	
Amount	100% of employee contributions plus interest, less total benefits paid to the pensioner.
Employee Contribution Rate	4.75% of basic annual earnings. Interest is credited based upon 120% of the federal mid-term rate each year.
Changes in Plan Provisions	There have been no changes in plan provisions since the prior valuation.

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TOWN OF MONROE POLICE – OPEB

GASB 45 VALUATION REPORT - REVISED

AS OF JULY 1, 2014

hooker & holcombe

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Actuarial Certification

This report presents the results of the July 1, 2014 Actuarial Valuation for the Town of Monroe's post-retirement benefit other than pension (OPEB) for Police employees and retirees (the Plan) for the purpose of estimating the funded status of the Plan and determining the Annual Required Contribution (ARC) for the fiscal years ending June 30, 2016 and June 30, 2017. This report is intended to satisfy the requirements of Connecticut General Statute 7-450a. This report may not be appropriate for any other purpose.

The valuation has been performed in accordance with generally accepted actuarial principles and practices. It is intended to comply with all applicable Actuarial Standards of Practice.

I certify that the actuarial assumptions and methods that were selected by me and represent my best estimate of anticipated actuarial experience under the Plan.

In preparing this valuation, I have relied on employee data provided by the Plan Sponsor, and on asset and contribution information provided by the Town. I have audited neither the employee data nor the financial information, although I have reviewed them for reasonableness.

The results in this valuation report are based on the Plan as summarized in the *Summary of Plan Provisions* section of this report and the actuarial assumptions and methods detailed in the *Description of Actuarial Methods and Assumptions* section of this report.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as: plan experience differing from that anticipated by the economic or demographic assumptions; 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. Due to the limited scope of this report, an analysis of the potential range of such future measurements has not been performed.

I am a member of the American Academy of Actuaries and meet its Qualification Standards to render the actuarial opinion contained herein.

Timothy A. Ryor, FSPA, FCA, MAAA,
Enrolled Actuary 14-05126

December 18, 2015

Unfunded Actuarial Accrued Liability and Annual Required Contribution

GASB 45 Unfunded Actuarial Accrued Liability (UAAL)

Actuarial Accrued Liability 7/1/2014	
Actives	805,000
Retirees	193,000
Total	**998,000**
Assets 7/1/2014*	232,000
Unfunded Actuarial Accrued Liability (UAAL) 7/1/2014*	**766,000**

GASB 45 Annual Required Contribution (ARC)

Annual Required Contribution (ARC) 2015/ 2016 Fiscal Year	
Normal Cost	63,000
30 Year Amortization of UAAL	58,000
Interest Cost - Mid Year	4,000
Offset for Employee Contributions*	(19,000)
Total ARC 2015 / 2016	**106,000**
Expected Benefit Payments (EBP)	**41,000**
ARC minus EBP 2015 / 2016	**65,000**

Annual Required Contribution (ARC) 2016 / 2017 Fiscal Year	
Normal Cost	67,000
30 Year Amortization of UAAL	58,000
Interest Cost - Mid Year	4,000
Offset for Employee Contributions*	(20,000)
Total ARC 2016 / 2017	**109,000**
Expected Benefit Payments (EBP)	**55,000**
ARC minus EBP 2016 / 2017	**54,000**

*Reflects intent to create trust and pre-fund.

Participant Counts and Average Age
As of July 1, 2014

Group	Count	Average Age
Actives	37	41
Retirees - Regular	1	60
Retirees - H&H	1	77

As of July 1, 2012

Group	Count	Average Age
Actives	38	40
Retirees - Regular	3	57
Retirees - H&H	3	64

Projected Benefit Payments

Fiscal Year Beginning July 1st	Currently Active Employees	Currently Retired Employees	Total
2015	$19,000	$22,000	$41,000
2016	31,000	24,000	55,000
2017	35,000	25,000	60,000
2018	47,000	26,000	73,000
2019	55,000	27,000	82,000
2020	78,000	15,000	93,000
2021	83,000	15,000	98,000
2022	101,000	15,000	116,000
2023	126,000	14,000	140,000
2024	137,000	14,000	151,000
2025	121,000	13,000	134,000
2026	111,000	12,000	123,000
2027	116,000	11,000	127,000
2028	137,000	10,000	147,000
2029	128,000	9,000	137,000

Actuarial Methods

Actuarial Cost Method

Cost Method: Projected Unit Credit.

The Normal Cost is derived for each active participant as the actuarial present value of the projected benefits that are attributed to expected service in the current plan year. The Normal Cost for plan benefits is the total of the individual Normal Costs for active participants.

The Accrued Liability is equal to the portion of the present value of future benefits that is allocated to years of service before the valuation date.

Amortization Method

The Unfunded Accrued Liability is amortized each year over a constant 30 year period, as a level dollar amount.

Asset Valuation Method

Market Value, upon establishment of a trust.

Actuarial Assumptions Applicable to Non-Certified Staff

The actuarial assumptions used in the determination of costs and liabilities are as follows:

Discount Rate

7.0% reflects intent to create trust and pre-fund (previously 4.5%).

Mortality

RP-2000 Mortality Table with separate male and female rates, with no collar adjustment, separate table for non-annuitants and annuitants, projected to the valuation date with Scale BB. (Previously RP-2000 Mortality Table with separate male and female rates, with no collar adjustment, combined table for non-annuitants and annuitants, projected to the valuation date with Scale AA.)

Mortality Improvement

Projected to date of decrement using Scale BB (generational mortality).

Termination Rates

Termination is according to the following table:

Age	Termination rate
20	7.00%
25	7.00%
30	5.00%
35	4.00%
40	2.00%
45	1.00%
>=50	0.00%

Disability Rates

Service Connected Disability is according to the following table:

Age	Termination rate
20	.11%
25	.14%
30	.15%
35	.22%
40	.32%
45	.49%
50	1.11%
55	3.03%
60	6.88%

Retirement Rates

25 years of service with the following retirement rates:

Age	Rates
45	25%
50	20%
55	12%
60	20%
65	100%

Annual Premiums

2014 Anthem HAS: $10,053, with $2,000 Single Deductible.

Trend on Premium and HSA Deductible

9.0% in 2014, decreasing by 0.5% per year down to 5.0% in 2022 and beyond. (Previously 8.0% in 2012, decreasing by 1.0% per year down to 5.0% in 2015 and beyond.

Marriage Rates at Retirement

N/A. Only single coverage valued.

Aging Rates effect on Medical Costs

N/A. Premiums are effectively community rated.

Percentage of Actives Eligible at Retirement who continue with Medical Coverage

90%.

Patient Protection and Affordable Care Act (PPACA)

High Cost Plan Excise Tax ("Cadillac Tax"):

Effective in 2018 there will be a 40% excise tax on per capita medical benefit costs in excess of certain thresholds, which are $10,200 for single coverage and $27,500 for family coverage for Medicare eligible retirees. Thresholds for retirees who are between ages 55 and 65 are $11,850 and $30,950 for single and family coverage respectively. After 2018, the thresholds are indexed by CPI (CPI +1% in 2018 only). CPI is assumed to be 3.0% in all future years. The impact of this future excise tax has been reflected in plan liabilities.

Other Requirements of PPACA:

For purposes of this valuation, extended coverage for adult children and 100% coverage of preventive care are assumed to be reflected in per capita costs.

For purposes of this valuation, elimination of lifetime maximum benefits and removal of the limits on essential healthcare are assumed to have no impact on plan liabilities.

Summary of Principal Plan Provisions

This summary is provided for valuation purposes only. It outlines the major features of the Plan and does not give full details.

Retiree medical benefit

Eligibility: Police with 25 years of service are eligible for pre-65 medical coverage at retirement.

Retirees – Pre 65: The retiree pays 25% of the cost of single coverage and 25% of the HRA single deductible. The Town pays the remaining.

Duration: The earlier of age 65 or 15 years of coverage at retirement. No coverage thereafter.

Retirees – Post 65: No coverage for retiree or spouse after age 65.

One existing retiree has single coverage, fully paid by the Town.

Spousal medical benefit

The retiree pays 100% of the cost of coverage for the spouse (if applicable).

STATE EMPLOYEES
RETIREMENT COMMISSION

MEDICAL EXAMINING BOARD
For DISABILITY RETIREMENT

55 ELM STREET
HARTORD, CONNECTICUT
06106-1775
Telephone (860) 702-3500
Facsimile (860) 702-3571

STATE OF CONNECTICUT
RETIREMENT SERVICES DIVISION
OFFICE OF THE STATE COMPTROLLER

February 2, 2016

Mr. John Salvatore
Chief of Police
Monroe Police Department
7 Fan Hill Road
Monroe, CT 06468-1800
jsalvatore@monroectpolice.com

RE: Monroe Police 85-P

Dear Mr. Salvatore:

The purpose of this letter is to advise you of the costs for the above referenced unit to participate in the Connecticut Municipal Employees Retirement System (CMERS) for the fiscal year beginning July 1, 2016. The State of Connecticut Retirement Commission has authorized the contributions rates below to be effective for the July 1, 2016 to June 30, 2017 fiscal year.

- Monthly contribution payments, as a percentage of payroll, will be as follows:

Normal Cost	11.18%
Unfunded Accrued Liability	5.55%
Total	16.73%

- There is no annual amortization payment for prior service.
- The CMERS administrative charge is $8,450. This charge is based on $130 per active and retired member. Our most recent files show 38 active members and 27 retired members.

The State Employees Retirement Commission approved the above total contribution rate of 16.73% at its December 17, 2015 meeting. A copy of the July 1, 2015 roll forward actuarial valuation report can be found on the CMERS website at: http://www.osc.ct.gov/rbsd/cmers/plandoc/index.html#Plan.

If you have any questions regarding the information provided in this letter, please contact Rudolph Nelson, a CMERS staff member, at (860)702-3502.

Very truly yours,

THE CONNECTICUT MUNICIPAL EMPLOYEES RETIREMENT SYSTEM

BY:

Brenda K. Halpin

Brenda K. Halpin, Director
Retirement Services Division