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ACTUARIAL REPORT

FOR

TOWN OF ESSEX RETIREMENT PLAN

AS OF
JULY 1, 2012

AS APPLICABLE TO THE TOWN'S
FISCAL YEAR ENDING JUNE 30, 2014

Prepared by The Pension Service, Inc.
May 16, 2013

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TABLE OF CONTENTS

ITEMS	PAGE
INTRODUCTION	1
CERTIFICATION	2
ACTUARIALLY DETERMINED CONTRIBUTION	3
DEVELOPMENT OF ASSETS AND LIABILITIES	4
DETERMINATION OF THE ACTUARIAL GAIN / (LOSS)	5
BREAKDOWN OF THE ACTUARIAL GAIN / (LOSS)	6
SUMMARY OF THE PRESENT VALUE OF ACCRUED BENEFITS	7
RECONCILIATION OF PARTICIPANT DATA	8
RATE OF RETURN ON PLAN ASSETS	9
SUMMARY OF PLAN PROVISIONS	10 - 11
ACTUARIAL ASSUMPTIONS	12

INTRODUCTION

This actuarial valuation report of the Town of Essex Retirement Plan is based upon the actuarial valuation of the Plan as of July 1, 2012, and is applicable to the Town's fiscal year ending June 30, 2014.

The valuation has been based on the employee census data provided by the Town, and the trust fund data provided by the Trustee, Bank of America.

This section of the report presents a comparative summary of the valuation results. It also highlights any changes in actuarial assumptions or plan provisions, and other changes, from last year. Also, we have discussed the Plan experience for the year ended June 30, 2012.

	Valuation as of July 1, 2012	Valuation as of July 1, 2011
Applicable to Fiscal Year Ending	**6/30/2014**	**6/30/2013**
Actuarially Determined Contribution	$ *	$ *
Actuarial Value of Plan Assets	$2,238,392	$2,193,109
Number of Active Participants	25	22
Total Number of Participants	58	54
Covered Payroll	$1,250,915	$1,133,418
Average Compensation	$ 50,037	$ 51,519

* See page 3.

Changes Since Last Year

The assumed rate of return (interest rate assumption) has been reduced from 8.0% to 7.75%, effective beginning July 1, 2012, applicable to the Plan Year ending June 30, 2013. The 8.0% rate was used to determine the contributions and to measure the asset gain / (loss) for the Plan Year ended June 30, 2012.

Plan Experience

As is detailed on page 6, the Plan realized a net loss of $364,199 during the Plan Year ended June 30, 2012.

CERTIFICATION

We certify that this actuarial valuation was performed in accordance with accepted actuarial practices and the results presented herein represent an appropriate measure of the actuarial costs and liabilities of the plan. In our opinion, the actuarial assumptions used herein are reasonably related to the experience of the plan and to reasonable expectations, and represent our best estimate of anticipated future experience under the plan.

THE PENSION SERVICE, INC.

Jeffrey D. Poland, MSPA, MAAA
Enrolled Actuary No. 11-00361
May 16, 2013

ACTUARIALLY DETERMINED CONTRIBUTION

A)	Normal Cost	$ 92,609
B)	5-year Amortization of Unfunded Accrued Liability (20 Years from July 1, 1997)	$177,827
C)	Actuarially Determined Contribution, June 30, 2012 [(A) + (B)]	$270,436
D)	15 – Year Amortization of Unfunded Accrued Liability	$ 82,230
E)	[(A) + (D)]	$174,839

PERCENTAGE OF RECOMMENDED CONTRIBUTION BY DEPARTMENT

Department	Percentage of Contribution
Board of Education	18.3%
Town	81.7%

DEVELOPMENT OF ASSETS AND LIABILITIES

I) ASSETS

A)	Market Value, June 30, 2012	$2,015,253
B)	Book Value, June 30, 2012*	$2,005,463
C)	Average of Book and Market Values	$2,010,358
D)	Plus Accrued Contribution (for Plan Year ended June 30, 2012)	$ 228,034
E)	Actuarial Value of Assets	$2,238,392

II) LIABILITIES

Accrued Liability at July 1, 2012 for:

A)	Active Participants	$1,174,957
B)	Vested Terminated Participants	$ 366,296
C)	Retired Participants and Beneficiaries	$1,411,854
D)	Total	$2,953,107

III) Unfunded Accrued Liability [II(D) – I(C)] $ 714,715

* Original purchase price of securities.

DETERMINATION OF THE ACTUARIAL GAIN / (LOSS)

Under the projected unit credit cost method, changes in the plan's liabilities and assets different from those anticipated by the actuarial assumptions result in actuarial gains and losses, which are identified annually. Their magnitude indicates the extent to which actual plan experience has deviated from that assumed by the actuarial assumptions.

The determination of the actuarial gain/ (loss) for the plan year ended June 30, 2012 is as follows:

1)	Unfunded Actuarial Accrued Liability, July 1, 2011	$ 448,490
2)	Normal Cost, June 30, 2012	$ 94,181
3)	8% Interest on (1)*	$ 35,879
4)	Contributions for Plan Year Beginning July 1, 2011	$ 228,034
5)	Interest on (4), prorated from dates made	$ 0
6)	Expected Unfunded Actuarial Accrued Liability July 1, 2011 = [(1) + (2) + (3) – (4) – (5)]	$ 350,516
7)	Actuarial Accrued Liability, July 1, 2012	$2,953,107
8)	Actuarial Value of Assets, July 1, 2012	$2,238,392
9)	Actual Unfunded Actuarial Accrued Liability July 1, 2012 = [(7) – (8)]	$ 714,715
10)	Net Experience loss = [(6) – (9)]	$ (364,199)

* 8% was used for the year ended June 30, 2012. Effective July 1, 2012 7.75% has been assumed.

BREAKDOWN OF ACTUARIAL GAIN / (LOSS)

The net experience gain of $(364,199) is comprised of the following components:

1)	Asset gain / (loss)*	$ (198,561)
2)	New participants gain / (loss)	$ (29,816)
3)	Actuarial Experience, plus the increase in the Accrued Liability from the reduction in the assumed rate of return.	$ (135,822)
	Total loss	$ (364,199)

This gain is automatically reflected in the Unfunded Actuarial Accrued Liability.

* Based on an 8% assumed rate of return for the Plan Year ended June 30, 2012. A 7.75% rate of return will be assumed for the Plan Year ending June 30, 2013.

SUMMARY OF PRESENT VALUE OF ACCRUED BENEFITS

The actuarially computed Value of Accrued Benefits as of July 1, 2012 is as follows:

Retirees	$1,411,854
Vested Terminated	$ 366,296
Actives	$1,104,262
Total	$2,882,412
Actuarially computed Value of Non-Vested Accrued Benefits:	$ 22,131
Total actuarially computed Value of Accrued Benefits	$2,904,543
Actuarial Value of Plan Assets	$2,238,312
Market Value of plan Assets	$2,015,253

Note: The above actuarial values have been determined using the actuarial assumptions for interest and mortality stated on page 12, and provides an indication of the level of funding of the pension benefits that have been accrued to the actuarial valuation date by the Plan participants.

RECONCILIATION OF PARTICIPANT DATA

	Active Participants	Terminated Vested Participants	Disabled Participants, Retired Participants And Beneficiaries	All Participants
1. As Reported in July 1, 2011 Valuation	22	15	17	54
2. Terminated				
(A) With Vested Benefits	(1)	--	--	(1)
(B) Without Vested Benefits	0	--	--	0
3. Died				
(A) With Eligible Spouse	0	0	0	0
(B) Without Eligible Spouse	0	0	0	0
4. Disabled	0	--	--	0
5. Retired	0	0	--	0
6. Received Lump Sum Payment	0	0	0	0
7. New Entrants to Valuation Group	4	1	0	5
8. New Beneficiaries (Deceased Beneficiaries)	--	--	0	0
9. Transfers out of the Plan	0	0	0	0
10. As Reflected in July 1, 2012 Valuation (1+2+3+4+5+6+7+8 - 9)	25	16	17	58

RATE OF RETURN ON PLAN ASSETS

FOR PLAN YEAR ENDED JUNE 30, 2012

(AT ACTUARIAL VALUE)

1)	Assets as of June 30, 2011	$2,193,109
2)	Accrued contribution for Plan Year ended June 30, 2012	$ 228,034
3)	Pension Payments	$ 153,499
4)	Assets as of June 30, 2012	$2,238,392
5)	Net Increase in Assets [(4) – (1) – (2) + (3)]	$ (29,252)
6)	Approximate Annual Yield (5) ÷ {(1) + [1/2 x (2)] – [1/2 x (3)]}	(1.3)%

SUMMARY OF PLAN PROVISIONS

Effective Date: July 1, 1969.

Eligibility: All regularly employed employees (elected, appointed or hired) of the town excluding part time employees, temporary employees and teachers eligible for the Connecticut State Teachers Retirement System. Employees are eligible to participate provided they have attained age 21 and have completed 3 years of Credited Service.

Final Average Compensation: The average of annual compensation over the 5 consecutive calendar years of the last 10 calendar years, which produce the highest average.

Credited Service: Each plan year during which an eligible employee is paid for at least 1000 hours.

Normal Retirement:

Eligibility: Attainment of age 65 and 5 years of Credited Service. In addition effective July 1, 1994, retirement at the "Rule of 90", which is an unreduced pension commencing prior to age 65 provided that the sum of the age and Credited Service equals at least 90.

Benefit:

For Terminations Prior to July 1, 1995
1.25% of Final Average Compensation multiplied by years of Credited Service up to a maximum of 40 years.

For Terminations on and after July 1, 1995
1.4% of Final Average Compensation multiplied by years of Credited Service up to a maximum of 40 years.

Early Retirement:

Eligibility: Attainment of Age 55 and 15 years of Credited Service.

Benefit: Benefit accrued to Early Retirement Date reduced 0.5% for each month the participant retires prior to Normal Retirement Date.

SUMMARY OF PLAN PROVISIONS (CONT'D)

Disability Retirement:

Eligibility: Completion of 15 years of Credited Service and determined to be totally and permanently disabled.

Benefit: Accrued benefit to date of disability. The benefit is reduced for any payment received under the Workers Compensation Act.

Vesting:

Years of Credited Service	Vested Percentage
Less than 5 years	0%
5 or more years	100%

Spouse's Benefit:

Eligibility: The surviving spouse of a participant who has attained age 55 and who has 15 years of Credited Service is eligible for a death benefit.

Benefit: Equals 50% of the Joint and 50% Survivor Annuity the participant would have received if he had retired at the end of the month in which he died.

Normal Form Of Annuity: Life Annuity.

Actuarially Reduced Optional Forms Of Annuity:

1) Joint and 100% Survivor Annuity

2) Joint and 50% Survivor Annuity

3) 120 Months Certain and Life

ACTUARIAL ASSUMPTIONS

The actuarial assumptions utilized in an actuarial valuation to determine costs and liabilities of a pension plan represent the actuary's estimate of anticipated future experience under the plan. Because they are estimates, the assumptions are reviewed annually and revised when appropriate.

The actuarial assumptions used in the valuing liabilities and calculating the contributions to the pension plan are as follows:

Actuarial Cost Method:	Projected Unit Credit. Under this method, gains and losses are identified each year, and are automatically amortized as part of the Unfunded Accrued Liability.
Asset Valuation Method:	Assets are valued using the average of the Cost Basis and the Market Value, where the cost basis is the original price of the securities, including accrued contributions for the Plan Year ended June 30, 2012.
Mortality:	Pre- and Post-Retirement: 1983 Group Annuity Mortality Table; male rates for males, and female rates for females.
Interest:	A rate of return (net of investment expenses) of 7.75% per year has been assumed on the actuarial value of assets as defined above, beginning July 1, 2012 and ending June 30, 2013. An 8% per year rate of return was assumed for the year ended June 30, 2012.
Turnover:	T-3 withdrawal table by Sarason.
Retirement Age:	65 and 5 years of Credited Service.
Salary Scale:	Salaries for continuing participants have been assumed to increase at 4.5% per year.