CLASSIFIED EMPLOYEES' RETIREMENT TRUST FUND OF THE CITY OF STAMFORD

CITY OF STAMFORD

ACTUARIAL VALUATION REPORT

JULY 1, 2015

hooker & holcombe

Table of Contents

Report Prepared By:

Evan W. Woollacott	Yelena Pelletier	Michael Lindberg
Vice President and Consulting Actuary	Actuary	Actuarial Analyst
860.856.2118	860.856.2066	860.856.2132
ewoollacott@hhconsultants.com	ypelletier@hhconsultants.com	mlindberg@hhconsultants.com

I. Introduction

A. Purpose of the Valuation

Liabilities were valued as of July 1, 2014 using data, cost information, and assumptions as of July 1, 2014. The July 1, 2014 liabilities were then projected to July 1, 2015.

The purpose of the valuation is to report the estimated funded status of the plan as of July 1, 2015 as well as an actuarially determined contribution for the fiscal year ending June 30, 2017.

It is important to note that 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,

City's Ultimate Cost = Benefits Paid + Expenses Incurred – Employee Contributions – Investment Return

Assets reported are actual (including accruals) through June 30, 2015 and reflect the asset smoothing method. Liabilities have been projected from the last full valuation done as of July 1, 2014.

We have assumed that no changes have been made to the plans since the July 1, 2014 actuarial valuation. However, we have adjusted the census data for the Smith House participants.

B. Comments

The market value return was 1.5% this year. Because we were still smoothing in past asset gains, the actuarial smoothed return was 6.8% this year. Asset returns less than 7.625% increased the contribution by approximately $180,000. The addition of an expense assumption increased the contribution by $221,000. Using the 15 year open amortization method helped to reduce the contribution by approximately $109,000. The last step was to adjust the census for the Smith House participants. This adjustment reduced the contribution by $756,000. All in all, the contribution was $464,000 lower than last year.

We recommend a review of the actuarial interest rate assumption and the plan's retirement assumption. To accomplish this, an actuarial experience study is needed.

C. Certification

This report presents the results of the July 1, 2015 Actuarial Valuation for the Classified Employees' Retirement Trust of the City of Stamford (the Plan) for the purpose of estimating the funded status of the Plan and determining the Actuarially Determined Contribution (ADC) for the fiscal year ending 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.

Evan W. Woollacott

____

Evan W. Woollacott, Jr., FCA, MAAA
Enrolled Actuary 14-04513

April 19, 2016

II. Results of the Valuation

A. Assets

1.	**Beginning value, 7/01/2014**	
	a. Trust assets	$209,313,155
	b. Accrued contributions - Employee	$0
	c. Benefits payable	$0
	d. Administrative expenses payable	$0
	e. Net: (a) + (b) – (c) – (d)	$209,313,155
2.	**Contributions**	
	a. Contributions during year - Employer	6,799,000
	b. Contributions during year - Employee	2,017,452
	c. Total for Plan Year	8,816,452
3.	**Disbursements**	
	a. Benefit payments during year	14,405,292
	b. Administrative expenses during year	117,430
	c. Change in benefits payable	0
	d. Change in administrative expenses payable	0
	e. Total for plan year	14,522,722
4.	**Net Investment Return**	
	a. Interest and dividends	4,408,435
	b. Other Income	0
	c. Realized/unrealized gain (loss)	-1,196,682
	d. Investment – related expenses	-196,288
	e. Total	3,015,465
5.	**Ending Value, 6/30/2015**	
	a. Trust assets: (1e) + (2c) - (3e) + (4e)	206,622,350
	b. Accrued contribution – Employer	0
	c. Accrued contribution – Employee	0
	d. Benefit payable	0
	e. Administrative expenses payable	0
	f. Net: (a) + (b) + (c) – (d) – (e) or (1) + (2) – (3) + (4)	206,622,350
6.	**Approximate rate of return 2014-2015**	1.5%

II. Results of the Valuation

(continued)

1.	Actuarial Asset Value at July 1, 2014	$205,056,151
2.	Expected Return	15,685,950
3.	Contributions	8,816,452
4.	Disbursements	14,522,722
5.	Expected Actuarial Asset Value at June 30, 2015 (1) + (2) + (3) – (4)	215,035,831
6.	Market Value of Assets at July 1, 2015	206,622,350
7.	Appreciation (Depreciation) Capitalized .20 x [(6) – (5)]	-1,682,696
8.	Preliminary Actuarial Asset Value at June 30, 2015 (5) + (7)	213,353,135
9.	70% of Market Value .7 x (6)	144,635,645
10.	130% of Market Value 1.3 x (6)	268,609,055
11.	Actuarial Asset Value at June 30, 2015, not less than (9); and not greater than (10)	213,353,135
12.	Round to nearest thousand	213,353,000
13.	Actuarial Asset Return	6.81%

II. Results of the Valuation
(continued)

B. Target Asset Allocation

June 30, 2015

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return*	Weighting
Fixed Income	15.00%	2.00%	0.30%
Domestic Equity	30.00%	5.25%	1.58%
International Equity	20.00%	5.50%	1.10%
Asset Allocation	35.00%	3.84%	1.34%
	100.00%		4.32%
Long-Term Inflation Expectation			3.00%
Long-Term Expected Nominal Return			7.32%

**Long-Term Returns are provided by HHIA and FIA. The returns are geometric means.*

The long-term expected rate of return on pension plan investments was determined using a building block method in which best-estimate ranges of expected future real rates of return are developed. Best estimates of the real rates of return for each major asset class are included in the pension plan's target asset allocation.

The information above is based on geometric means and does not reflect additional returns through investment selection, asset allocation and rebalancing. The results support a rate between 7.07% and 7.57%. An expected rate of return of 7.625% was used.

II. Results of the Valuation

(continued)

C. Development of Projected Accrued Liability and Funded Ratio

		July 1, 2015 Interim Valuation	July 1, 2014 Valuation	July 1, 2013 Interim Valuation
1.	Projected Accrued Liability	$241,905,000	$235,975,000	$227,311,000
2.	Assets (Actuarial Value)	$213,353,000	$205,056,000	$194,422,000
3.	Unfunded Accrued Liability: (1) - (2)	$28,552,000	$30,919,000	$32,889,000
4.	Funded Ratio: (2) ¸ (1)	88.2%	86.9%	85.5%

II. Results of the Valuation

(continued)

D. Actuarially Determined Contribution

		July 1, 2015 for Fiscal Year Ending 30-Jun-17	July 1, 2014 for Fiscal Year Ending 30-Jun-16	July 1, 2013 for Fiscal Year Ending 30-Jun-15
1.	Ongoing Annual Cost	$4,307,000	$4,848,000	$4,828,000
2.	Administrative Expense Assumption	$221,000	N/A	N/A
3.	Estimated Actuarial Employee Contributions	1,634,000	1,741,000	1,541,000
4.	City's Ongoing Annual Cost: (1) + (2) - (3)	2,894,000	3,107,000	3,287,000
5.	Amortization of Unfunded Accrued Liability (15 years)	3,029,000	3,280,000	3,512,000
6.	City's Annual Contribution: [(4) + (5)]	5,923,000	6,387,000	6,799,000

2015 Valuation	Board of Education	City	WPCA	Total
City Normal Cost	331,000	2,411,000	152,000	2,894,000
Accrued Liability	27,483,000	202,043,000	12,379,000	241,905,000
Assets	24,023,000	178,509,000	10,821,000	213,353,000
Unfunded Accrued Liability	3,460,000	23,534,000	1,558,000	28,552,000
Amortization	367,000	2,497,000	165,000	3,029,000
City Contribution Allocation	698,000	4,908,000	317,000	5,923,000
Interest Rate	7.625%	7.625%	7.625%	7.625%

III. Actuarial Cost Methods and Assumptions

A. Actuarial Cost Methods

Funding Method

The actuarial method used to develop the Annual Recommended Contribution is the Projected Unit Credit Cost Method.

The Ongoing Annual Cost equals the total present value for all participants of the benefit accruing during the coming year, increased to reflect salaries projected to the assumed retirement date.

The Accrued Liability equals the present value of all benefits accrued to date, increased to reflect salaries for all active participants. The total Accrued Liability is reduced by plan assets to develop the Unfunded Accrued Liability.

The cost of amortizing the Unfunded Accrued Liability constitutes a portion of the Annual Recommended Contribution.

The total Annual Recommended Contribution equals the Ongoing Annual Cost, further increased by any positive amortization of the Unfunded Accrued Liability. The amortization period is 15 years.

Asset Valuation Method

The Actuarial Value of Assets used in the development of the Annual Recommended Contribution is designed to smooth out fluctuations in the market value. An Expected Actuarial Value of Assets is determined based on the prior year's Actuarial Value of Assets and the assumed interest rate equal to the valuation interest rate. The Actuarial Value of Assets is equal to the Expected Actuarial Asset Value plus 20% of the difference between the Market Value and the Expected Value. The Actuarial Value of Assets is limited to a minimum of 70% or a maximum of 130% of the Market Value.

III. Actuarial Cost Methods and Assumptions

(continued)

B. Actuarial Assumptions

Inflation

3.0%.

This assumption is based on long term (1926-2013) historical inflation numbers. While near term averages have been lower, we do not believe this trend will continue indefinitely and expect that there will be a reversion to the long term average.

Mortality

50/50 Blend of RP-2000 No Collar Combined Table and RP-2000 Blue Collar Combined Table.

Mortality Improvement

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

We have selected mortality tables commonly used by public pension systems (such as the State of Connecticut). The plan does not have sufficiently credible data on which to perform a mortality experience study.

We are using Scale BB because it is the most up to date mortality improvement scale which was developed for use with RP-2000.

Investment Return

7.625 per year (net of investment expenses).

Salary Scale

Yearly Rates of Increases

Age	Rate
20	6.50%
25	6.50%
30	5.85%
35	5.20%
40	4.55%
45	3.90%
50	3.25%
55+	3.00%

This year a one-time adjustment was made to the UAW group to reflect actual bargained increases.

The assumption is based on input from the plan sponsor regarding future expectations, as well as knowledge that younger employees generally earn higher annual percentage increases than older employees.

III. Actuarial Cost Methods and Assumptions

(continued)

Retirement Age

Assumed annual rates of retirement after the earliest of 1) 50 with 25 years of service, 2) 55 with 15 years of service, or 3) 60 with 10 years of service are as follows:

Age	Retirement Rate
50-61	5%
62-65	100%

Turnover

The following annual rates of turnover are assumed:

Age	Probability
20	10.6%
25	7.9%
30	5.8%
35	4.2%
40	3.1%
45	2.1%
50	1.3%
55	0.5%
60	0.5%

Disability

The following annual rates of disability are assumed:

Age	Probability
20	.05%
25	.05%
30	.05%
35	.06%
40	.09%
45	.18%
50	.40%
55	.85%
60	.85%

The actuarial assumptions in regards to rates of decrement shown above are based on standard tables modified for certain plan features such as eligibility for full and early retirement where applicable and input from the plan sponsor.

Payroll Growth

3%, only used to project normal cost to the next year.

III. Actuarial Cost Methods and Assumptions

(continued)

Medicare Part B Reimbursements

3% per year increase assumption.

Survivorship

80% of employees assumed to be married, with wives 4 years younger than husbands.

Expenses

The assumed administrative expense is the average of the prior two years. For this valuation, that amount is $221,000. This amount was added to the plan's Normal Cost.

Pension Service Exchange and Payout Bank

50% of retirees are assumed to elect the maximum exchange (based on their current bank) and 50% of retirees are assumed to elect a lump sum payout.

IV. Summary of Current Principal Pension Plan Provisions

Pension Earnings

Salary in Final Year of Employment. For UAW, the average of the highest three years out of the last 10 years.

Normal Retirement

Eligibility: The earlier of 1) age 58 with 15 years of service, or 2) age 60 with 10 years of service, or 3) 25 years of service for MAA only.

For UE participants hired on or after 7/1/2012, the 58 and 15 criteria does not apply. For UAW, the 58 and 15 criteria only applies for a grandfathered group (those age 55 with 25+ year of service on 1/1/2015).

Benefit: 2% of pension earnings per year of service to a maximum of 33 years.

For UE participant hired on or after 7/1/2012, the maximum is 30 years of service.

For UAW:

- 1.75% for service after 1/1/2015 for those who are not grandfathered (grandfathered if 25+ years of service or otherwise eligible to retire on 1/1/2015)
- 1.5% for new hires after 1/1/2015
- The maximum multiplier is 70%.

Limits on Annual Benefit

Maximum: None.

Minimum: $1,000 with 25 years of service.

Early Retirement

Eligibility: Age 50 with 25 years of service.

Benefit: Accrued retirement benefit reduced .25% for each of the first 36 months prior to age 58 and .55% for each month in excess of 36. There is no reduction for a member of the MAA who retires with 25 years of service.

Disability – Non-Service Connected

Service Requirement: 10 years of service, except 15 for UAW, Nurses, and Dental.

Benefit: 50% of pension earnings if less than 25 years of service. Accrued retirement benefit if more than 25 years of service.

Disability – Service Connected

Service Requirement: None.

Benefit: 50% of pension earnings.

IV. Summary of Current Principal Pension Plan Provisions

(continued)

Pre-Retirement Death Benefit – Non Service Connected

Service Requirement: None.

Benefit: Return of contributions if less than 15 years of service. $166.67 minus social security with 15 years of service or more and not eligible to retire. 100% Joint & Survivor benefit if eligible to retire.

Pre-Retirement Death Benefit – Service Connected

Service Requirement: None.

Benefit: 50% of pension earnings less workman's compensation, minimum $83.33.

Post-Retirement Spouse's Benefit

None.

Post-Retirement Death Benefit

Lump sum, excess of accumulated contributions over benefits paid to member or survivors (if not eligible for spouse's benefit).

Postretirement Life Insurance

Lump sum equal to 6,000 for all retirees except for the LAW.

Vesting in Accrued Benefit

Eligibility: 5 years of service (10 years of service for TEA and UE), payable at later of termination date and age 60 (age 58 if 15+ years of vesting service and eligible for Normal Retirement at 58 and 15).

Benefit: Accrued retirement benefit.

Termination Benefit

Accumulated contributions as lump sum, if not vested.

Employee Contributions

Current: 3% of salary for 1199, 6% of salary for UE and 5% of salary for all others. For UAW participants with multiplier less than 2%, 4.5% of salary.

For LAW, those with 33+ years of service on 8/5/13 do not contribute. For MAA, Nurses, Teamsters, UE and Dental Hygienists, those with 33+ years of service on 7/1/2012 do not contribute. For all other unions, no contributions for those with service over the limit for benefit calculation purposes.

IV. Summary of Current Principal Pension Plan Provisions

(continued)

Vacation/Sick Leave Banks:

Union	Payout Bank Source	Additional Pension Credits Available		Eligibility Cut off Date for Sick Pay	Eligibility Cut off Date for Vacation Pay
		Vacation	Sick		
1119	Operating Budget	Yes-payout only	Yes-payout only	7/1/1998	-
Dental	CERF	No	Yes	7/1/1997	-
Law	Operating Budget	Yes-payout only	Yes-payout only	-	-
MAA	CERF	Yes	Yes	7/1/1997	-
Nurses	CERF	Yes	Yes	7/1/1997	-
Teamsters	CERF	Yes	Yes	7/1/1997	-
UAW	CERF	Yes	Yes	7/1/1998	1/1/2015
UE	CERF	Yes	Yes	7/1/2012	7/1/2012

UE hires on or after 7/1/2012 not eligible for exchange. UAW hires on or after 1/1/2015 not eligible for exchange.

The amount of the exchange/payout bank is equal to 50% of sick days subject to a 75 day maximum, plus vacation days. Employees can trade in up to 100 days of eligible time for additional pension credit. Each 25 days grants an additional 1% of salary up to a maximum of 4%. The remainder of the bank is paid out in a lump sum.

Additional Provisions

Employees in the MAA, LAW and Dental Hygienists Union can pay 3% of 2011-2012 base salary for one additional year of service credit. The additional benefit will only be paid at age 65+. Payment must be made by 6/30/2013 or 6/30/2014 (depending on Union). Not reflected in prior valuation.