CITY OF STAMFORD OPEB PLAN

GASB 45 AND GASB 74 DISCLOSURE

REPORTING AS OF JUNE 30, 2017

hooker & holcombe

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All the items listed below are required by GASB 74 but are not included in this report:

Statement of Changes in Fiduciary Net Position

Statement of Fiduciary Net Position

Investments That Represent 5% or More of the Plan's Fiduciary Net Position

Investment Policy

OPEB Board Composition

Authority to Amend Plan

Report Prepared By:

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Certification

This report presents the results of the June 30, 2017 GASB 45 and GASB 74 Disclosure for the City of Stamford (the Plan). The report is intended to satisfy the requirements of both GASB 45 and GASB 74. This report may not be appropriate for any other purpose.

The report has been performed in accordance with generally accepted actuarial principles and practices. It is intended to comply with the Actuarial Standards Board 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 disclosure report, I have relied on employee data provided by the Plan Sponsor, and on asset and contribution information provided by the Plan Sponsor or Trustee. I have audited neither the employee data nor the financial information, although I have reviewed them for reasonableness.

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

Future actuarial measurements may differ significantly from the current measurements presented in this report due to factors such as, but not limited to, the following: 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 have no relationship with the employer or the Plan that would impair, or appear to impair, my objectivity in performing the work presented in this report. 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 17-04513

December 26, 2017

Money-Weighted Rate of Return
June 30, 2017

Beg. Value 67,039,401 **Ending Value** 92,167,012

	Date	Employer Contributions	Active Member Contributions*	Benefit Payments	Admin. Expenses	Net External Cash Flows	Period Invested	Period Weight	Net External Cash Flows w/ Interest
Beg. of Yr.	7/1/2016						12	1.000	76,042,457
July	7/31/2016	-	30,587	(1,060,972)	(1,051)	(1,031,436)	11	0.917	(1,157,731)
August	8/31/2016	11,329,000	30,587	(1,060,972)	(1,051)	10,297,564	10	0.833	11,437,721
September	9/30/2016	13,871,724	30,587	(1,060,972)	(1,051)	12,840,288	9	0.750	14,112,998
October	10/31/2016	-	30,587	(1,060,972)	(1,052)	(1,031,437)	8	0.667	(1,121,829)
November	11/30/2016	-	30,587	(1,060,972)	(1,052)	(1,031,437)	7	0.583	(1,110,111)
December	12/31/2016	-	30,587	(1,060,972)	(1,052)	(1,031,437)	6	0.500	(1,098,514)
January	1/31/2017	-	30,587	(1,060,972)	(1,052)	(1,031,437)	5	0.417	(1,087,039)
February	2/28/2017	-	30,588	(1,060,972)	(1,052)	(1,031,436)	4	0.333	(1,075,683)
March	3/31/2017	-	30,588	(1,060,972)	(1,052)	(1,031,436)	3	0.250	(1,064,446)
April	4/30/2017	-	30,588	(1,060,972)	(1,052)	(1,031,436)	2	0.167	(1,053,327)
May	5/31/2017	-	30,588	(1,060,972)	(1,052)	(1,031,436)	1	0.083	(1,042,324)
June	6/30/2017	1,416,276	30,588	(1,060,972)	(1,052)	384,840	0	0.000	384,840
End of Yr.	6/30/2017	26,617,000	367,049	(12,731,664)	(12,621)				92,167,012

*Includes TRB subsidy

Money-Weighted Rate of Return	**13.43%**

Schedule of Investment Returns
Last Fiscal Year

Year Ended June 30:	Annual Money-Weighted Rate of Return, Net of Investment Expense
2017	13.43%

Contributions Compared to ADEC and Payroll
Schedule of Contributions for Last Fiscal Year

	2017
Actuarially determined employer contribution (ADEC)	$ 26,617,000
Contributions in relation to the ADEC	26,617,000
Contribution deficiency (excess)	$ -
Covered payroll	$ 245,488,525
Contributions as a % of covered payroll	10.84%

Discount Rate Calculation

The long-term expected rate of return on investments may be used to discount liabilities to the extent that the plan's fiduciary net position and future contributions are projected to be sufficient to cover expected benefit payments and administrative expenses for current plan members. Projections of the plan's fiduciary net position incorporate all cash flows for contributions from the employer and employee and administrative expenses. Professional judgment should be applied to the projections of contributions in circumstances where (a) contributions amounts are established by statute or contract or (b) a formal written policy exists. Consideration should also be given to the most recent five-year contribution history as key indicators of future contributions. It should not include cash flows for future plan members.

If the amount of the plan's fiduciary net position is projected to be greater than or equal to the benefit payments and administrative expenses made in that period, the actuarial present value of payments should be discounted using the long-term expected rate of return on those investments. A 20-year, high quality (AA/Aa or higher), tax-exempt municipal bond yield or index rate must be used to discount benefit payments for periods where the fiduciary net position is not projected to cover expected benefit payments and administrative expenses.

Plans that are projected to have sufficient fiduciary net positon indefinitely will use the long-term expected return on investments to determine liabilities but will have to substantiate their projected solvency.

GASB permits alternative methods to evaluate the sufficiency of the plan's net fiduciary position. Based on the plan's current net OPEB liability and current contribution policy, the plan's projected fiduciary net position will be sufficient to cover projected benefit payments and administrative expenses indefinitely. Therefore, since the fund is not projected to run out of money, we have used the 7.5% interest rate assumption to discount plan liabilities.

Target Allocation and Expected Rate of Return
Actuarial Valuation as of July 1, 2016

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return*	Weighting
Fixed Income	10.00%	1.95%	0.20%
Domestic Equity	25.00%	5.08%	1.27%
International Equity	21.00%	6.00%	1.26%
Alternatives	5.00%	5.00%	0.25%
Asset Allocation	39.00%	4.06%	1.58%
	100.00%		4.56%
Long-Term Inflation Expectation			2.75%
Long-Term Expected Nominal Return			7.31%

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

The long-term expected rate of return on OPEB 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 OPEB 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 7.0% and 7.5%. An expected rate of return of 7.50% was used.

The July 1, 2016 Actuarial Valuation directly calculated the July 1, 2016 Total OPEB Liability (TOL). The July 1, 2016 TOL was increased by service cost and interest and decreased by benefit payments to estimate the TOL as of June 30, 2017.

Schedule of Changes in Net OPEB Liability
Last 1 Fiscal Years

	2017
Total OPEB liability	
Service cost	$ 7,475,304
Interest	25,271,089
Changes of benefit terms	-
Differences between expected and actual experience	(2,079,421)
Changes of assumptions	-
Benefit payments, including refunds of member contributions	(12,731,664)
Net change in total OPEB liability	17,935,308
Total OPEB liability - beginning	336,744,216
Total OPEB liability - ending: (a)	$ 354,679,524
Plan fiduciary net position	
Contributions - employer	$ 26,617,000
Contributions - active member	181,154
Contributions - TRB subsidy	185,895
Net investment income	10,887,847
Benefit payments, including refunds of member contributions	(12,731,664)
Administrative expenses	(12,621)
Other	-
Net change in plan fiduciary net position	25,127,611
Plan fiduciary net position - beginning	67,039,401
Plan fiduciary net position - ending: (b)	92,167,012
Net OPEB liability - ending: (a) - (b)	$ 262,512,512
Plan fiduciary net position as a % of total OPEB liability	25.99%
Covered payroll	$ 245,488,525
Net OPEB liability as a % of covered payroll	106.93%

Schedule of Net OPEB Liability
Last 2 Fiscal Years

	2017	2016
Total OPEB liability*	$ 354,679,524	$ 336,744,216
Plan fiduciary net position	92,167,012	67,039,401
Net OPEB liability (asset)	$ 262,512,512	$ 269,704,815
Plan fiduciary net position as a % of total OPEB liability	25.99%	19.91%
Covered payroll	$ 245,488,525	$ 239,430,000
Net OPEB liability as a % of covered payroll	106.93%	112.64%

**Total OPEB liability calculated using the Entry Age Normal Actuarial Cost Method, as required by paragraph 54 of GASB Statement 74.*

Sensitivity of the Net OPEB Liability to Changes in the Discount Rate

	Current Discount Rate (7.50%)	1% Decrease (6.50%)	1% Increase (8.50%)
Net OPEB liability as of June 30, 2017	$ 262,512,512	$ 308,567,818	$ 224,448,206

Sensitivity of the Net OPEB Liability in the Healthcare Cost Trend Rates

	Healthcare Cost Trend Rates (7.50% decreasing to 4.50%)	1% Decrease (6.50% decreasing to 3.50%)	1% Increase (8.50% decreasing to 5.50%)
Net OPEB liability as of June 30, 2017	$ 262,512,512	$ 218,358,279	$ 316,733,816

Participant Breakdown as of July 1, 2016

	Participant Count
Inactive plan members or beneficiaries currently receiving benefits	1,072
Inactive plan members entitled to but not yet receiving benefits	0
Active plan members	3,195
Total members	4,267

Calculation of Net OPEB Obligation

Calculation of Net OPEB Obligation	
Annual required contribution	$26,617,000
Interest on net OPEB obligation	5,115,000
Adjustment to annual required contribution	(5,165,000)
Annual OPEB cost (expense)	26,567,000
Contributions made	(26,617,000)
Increase in net OPEB obligation	(50,000)
Net OPEB obligation - June 30, 2016	68,206,000
Net OPEB obligation - June 30, 2017	68,156,000

History of AOC and NOO

Fiscal Year Ending	Annual OPEB Cost (AOC)	Actual Contribution	Percentage of AOC Contributed	Net OPEB Obligation (NOO)
June 30, 2013	$30,638,000	$19,335,000	63%	$46,366,000
June 30, 2014	27,955,000	20,844,000	75%	53,477,000
June 30, 2015	28,354,000	19,026,000	67%	62,805,000
June 30, 2016	27,034,000	21,633,000	80%	68,206,000
June 30, 2017	26,567,000	26,617,000	100%	68,156,000

Description of Significant Changes Prior to Year End

There were no significant plan changes since the last published valuation.

Valuation Date and Roll Forward Process

The Plan Sponsor uses the July 1, 2015 Actuarial Valuation to calculate the ADEC for the fiscal year ending 2017.

The July 1, 2016 Actuarial Valuation directly calculated the July 1, 2016 Total OPEB Liability (TOL). The July 1, 2016 TOL was increased by service cost and interest and decreased by benefit payments to estimate the TOL as of June 30, 2017. The TOL as of June 30, 2017 was also adjusted to reflect any material plan changes after the valuation, if applicable.

Funding Policy

The Plan Sponsor's Funding Policy is to contribute the ADEC.

Assumption Selection

The selections of all assumptions used in determining the total OPEB liability were made in conformity with Actuarial Standards of Practice issued by the Actuarial Standards Board.

The actuarial assumptions used in the valuation were 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. A full actuarial experience study has not been completed, except for Fire where the assumptions were based on the results of an actuarial experience study. An actuarial study for the Police has now been completed and those results will be used in the July 1, 2017 OPEB Valuation and June 30, 2018 disclosure report.

Description of Actuarial Methods

Asset Valuation Method

Plan Assets equal the Market Value of assets.

Actuarial Cost Method

Cost method for determining the GASB liability: Entry Age Normal Actuarial Cost Method (level percentage of salary).

Cost method for determining the ADEC: Projected Unit Credit Actuarial Cost Method

Normal Cost: Under this method, the normal cost equals the total present value of the benefits accruing for all members during the upcoming year, increased to reflect salaries projected to the assumed retirement date.

Unfunded Accrued Liability: The actuarial accrued liability equals the present value of all benefits accrued to date, increased to reflect salaries for all active members. The actuarial accrued liability is reduced by plan assets to develop the unfunded accrued liability. This amount is amortized over 20 years on an open basis.

Experience Gains and Losses: All experience gains and losses (the financial effect of the difference between the actual experience during the prior period and the result expected by the actuarial assumptions for that prior period) appear directly in the actuarial accrued liability and are amortized at the same rate the plan is amortizing the remaining unfunded accrued liability.

Description of Actuarial Assumptions
City

Discount Rate

7.5% per annum

The discount rate is based on the expected long-term return of plan assets for OPEB plans that are funding.

Inflation

2.75% (Prior: 3.00%)

This assumption is based on long term 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.

The assumption was changed to better reflect expected experience.

Mortality

CERF & WPCA: RP-2000 Mortality Table with separate male and female rates, with 50% blue collar adjustment and 50% no collar adjustment, combined table for non-annuitants and annuitants, projected to the valuation date with Scale BB.

Police & Fire: RP-2000 Mortality Table with separate male and female rates, with blue collar adjustment, combined table for non-annuitants and annuitants, projected to the valuation date with Scale BB (prior: Scale AA).

We have selected a mortality table commonly used by public pension systems (such as the State of Massachusetts). It is a recently published pension mortality study released by the Society of Actuaries. The plan does not have sufficiently credible data on which to perform a mortality experience study.

Mortality Improvement

CERF & WPCA: Projected to date of decrement using Scale BB (generational mortality).

Police & Fire: Projected to date of decrement using Scale BB (generational mortality) (prior: Scale AA).

We are using these scales because they are consistent with recent industry analysis of future mortality improvement.

The change in assumption increased the liabilities.

Separation from Employment

Annual rates of withdrawal and disability are as follows:

Withdrawal			
Age	Classified and WPCA Employees	Police Firefighters	Disability
20	.1060	.0544	.0005
25	.0790	.0489	.0005
30	.0580	.0370	.0005
35	.0420	.0235	.0006
40	.0310	-	.0009
45	.0210	-	.0018
50	.0130	-	.0040
55	.0050	-	.0085
60	-	-	-*

** .0174 for Police and Firefighters only.*

Retirement

CERF & WPCA: Annual rates of retirement for CERF and WPCA, after reaching retirement eligibility, are as follows:

CERF and WPCA	
Age	Retirement
50-61	.05
62-65	1.00

Police: Annual rates of retirement for Police, after completion of 25 years of service, are as follows:

Police	
Age	Retirement
55	.50
56	.50
57	.50
58	.50
59	.50

An additional 50% probability of retirement is added upon attainment of 20 years of service and 100% of those members remaining beyond the earlier of age 60 with 25 years of service or age 65 are assumed to retire.

Firefighters:

Ret Rates by Years of Service*	
Years	Rate
25	0.040
26	0.000
27	0.040
28	0.040
29	0.040
30	0.040
31	0.040
32	0.180
33	0.110
34	0.380
35	0.100
36	0.220
37	0.000
38	0.290
39	0.200
40	1.000

** Retirement rate at age 65 is 1.00*

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.

Unit Costs

The 2016 assumed annual average per-capita incurred medical unit costs are as follows:

Current Retirees:

Plan	CIGNA & Medco	IPI & Medco
Pre-Medicare	$16,894	$8,226
Post-Medicare	9,434	8,226

Future Retirees:

Plan	CIGNA & Medco
Pre-Medicare	$13,260
Post-Medicare	7,328

Premiums were used as the basis for per capita costs. The average allocation rates were derived by reflecting participation among the various plans offered by the employer.

Sample per capita claims

Active Pre-65

Sample Age	Expected Claim (Male)	Expected Claim (Female)
45	$8,633	$12,033
50	11,274	14,021
55	14,794	16,334
60	19,059	19,051
64	23,275	22,303

Retiree Pre-65

Sample Age	Expected Claim (Male)	Expected Claim (Female)
45	$8,079	$11,261
50	10,550	13,121
55	13,844	15,285
60	17,835	17,828
64	21,780	20,871

Retiree Post-65 (IPI)

Sample Age	Expected Claim (Male)	Expected Claim (Female)
65	6,520	6,179
70	7,475	7,076
75	8,126	7,719
80	8,547	8,163
85	8,600	8,217

Retiree Post-65 (Cigna)

Sample Age	Expected Claim (Male)	Expected Claim (Female)
65	8,114	7,689
70	9,303	8,807
75	10,113	9,606
80	10,637	10,159
85	10,703	10,226

The sample per capita claim for plans not integrated with Medicare was developed as follows: Using the total count of active participants eligible for post-retirement medical benefits and retirees currently electing medical coverage in a non-medicare supplement plan, we calculate the total projected claims by multiplying the total count by the average annual premium. Using the cost increases derived from a study sponsored by the Society of Actuaries prepared by Dale H. Yamamoto from May 2013: "Health Care Costs from Birth to Death", we allocate the total projected claims by age and gender.

(Prior: The sample per capita claim for plans not integrated with Medicare was developed as follows: Using the total count of active participants eligible for post-retirement medical benefits and retirees currently electing medical coverage in a non-medicare supplement plan, we calculate the total projected claims by multiplying the total count by the average annual premium. Using the cost increases derived from a study sponsored by the Society of Actuaries prepared by J.P. Petertil from August 1, 2003: "Aging Curves for Health Care Costs in Retirement", we allocate the total projected claims by age.)

The per capita claims method was changed to reflect the most recent study.

Health Care Cost Trend Rates

Medical: 7.5% in 2016, decreasing 0.5% per year to an ultimate rate of 4.5% in 2022.

Health care trend rates reflect both the current and long-term outlook for increases in health care costs. The short term trend rate is based on recent industry surveys, plan experience and near-term expectations. The long term trend rate is based on our general inflation assumption plus an adjustment to reflect expectations for long-term medical inflation.

Dental: Assumed to be 4.5% for all years (prior: 5.0%).

Retiree Contribution

Some current retirees have flat amounts with no future increases assumed. Other retirees and future retirees have percentage contributions, which are assumed to increase periodically with the Health Care Cost Trend.

Effective July 1, 2016, all active police employees shall contribute one percent of the Top Step Patrol Rate.

Medicare Coordination

For those participants who are eligible for Medicare, Medicare is assumed to remain the primary payor of medical benefits for retirees and spouses over age 65.

Medical Plan Enrollment and Dependent Assumption

Reported data was used to identify current covered retirees, spouses and surviving spouses. All active employees were assumed to elect coverage under the CIGNA Plans and be eligible for Medicare upon attainment of age 65. We assumed 60% of active members are married. Husbands are assumed to be four years older than their wives. Married participants were assumed to elect dual coverage.

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

Patient Protection and Affordable Care Act (PPACA)

High Cost Plan Excise Tax ("Cadillac Tax"): Effective in 2020, there will be a 40% excise tax on per capita medical benefit costs in excess of certain thresholds, which (in 2018) are $10,200 for single coverage and $27,500 for family coverage for Medicare eligible retirees. Thresholds (in 2018) 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 equal the inflation assumption.

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.

The change in the inflation assumption and the assumptions linked to inflation (such as trend rates and the Cadillac Tax indexed thresholds) decreased liabilities.

Actuarial Assumptions
Custodians

Discount Rate

7.5% per annum.

The discount rate is based on the expected long-term return of plan assets for OPEB plans that are funding.

Inflation

2.75%. (Prior: 3.00%)

This assumption is based on long term 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.

The assumption was changed to better reflect expected experience.

Separation from Employment

Annual rates of assumed withdrawal, disability and retirement are as follows:

Age	Withdrawal	Disability
25	0.0489	0.0005
30	0.0370	0.0005
35	0.0235	0.0006
40	0.0113	0.0009
45	0.0000	0.0018
50	0.0000	0.0040
55	0.0000	0.0085
>=60	0.0000	0.0000

Retirement	
Age	Rate*
60	0.20
61	0.05
62	0.20
63	0.20
64	0.20
65	0.20
66	0.20
67	0.20
68	0.20
69	0.20
>=70	1.00

** Custodians receive a one-time 50% decrement at 25 years of service.*

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.

Mortality

RP-2000 Mortality Table with separate male and female rates, with blue collar adjustment, combined table for non-annuitants and annuitants, projected to the valuation date with Scale BB.

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

Mortality Improvement

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

We are using Scale BB because it is was developed for use with RP-2000.

Unit Costs

The 2016 assumed annual average per-capita incurred medical unit costs are as follows:

Current Retirees:

Plan	CIGNA & Medco	IPI & Medco
Pre-Medicare	$16,894	$8,226
Post-Medicare	9,434	8,226

Future Retirees:

Plan	CIGNA & Medco
Pre-Medicare	$13,260
Post-Medicare	7,328

Allocation rates were used as the basis for per capita costs. The average allocation rates were derived by reflecting participation among the various plans offered by the employer.

Sample per capita claims

Active Pre-65

Sample Age	Expected Claim (Male)	Expected Claim (Female)
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65	8,114	7,689
70	9,303	8,807
75	10,113	9,606
80	10,637	10,159
85	10,703	10,226

The sample per capita claim for plans not integrated with Medicare was developed as follows: Using the total count of active participants eligible for post-retirement medical benefits and retirees currently electing medical coverage in a non-medicare supplement plan, we calculate the total projected claims by multiplying the total count by the average annual premium. Using the cost increases derived from a study sponsored by the Society of Actuaries prepared by Dale H. Yamamoto from May 2013: "Health Care Costs from Birth to Death", we allocate the total projected claims by age and gender.

(Prior: The sample per capita claim for plans not integrated with Medicare was developed as follows: Using the total count of active participants eligible for post-retirement medical benefits and retirees currently electing medical coverage in a non-medicare supplement plan, we calculate the total projected claims by multiplying the total count by the average annual premium. Using the cost increases derived from a study sponsored by the Society of Actuaries prepared by J.P. Petertil from August 1, 2003: "Aging Curves for Health Care Costs in Retirement", we allocate the total projected claims by age.)

The per capita claims method was changed to reflect the most recent study.

Health Care Cost Trend Rates

7.5% for 2016, decreasing 0.5% per year, to an ultimate rate of 4.5% for 2022 and later.

Health care trend rates reflect both the current and long-term outlook for increases in health care costs. The short term trend rate is based on recent industry surveys, plan experience and near-term expectations. The long term trend rate is based on our general inflation assumption plus an adjustment to reflect expectations for long-term medical inflation.

Retiree Contribution

For current retirees, some have flat contributions with no future increases assumed and others have a percentage contribution that is assumed to increase periodically with the Health Care Cost Trend. For future retirees, contributions are assumed to increase periodically with the Health Care Cost Trend.

Medicare Coordination

For those participants who are eligible for Medicare, Medicare is assumed to remain the primary payer of medical benefits for retirees and spouses over age 65.

Medical Plan Enrollment and Dependent Assumption

Reported data were used to identify current covered retirees, spouses and surviving spouses. All active employees were assumed to elect coverage under the CIGNA Plans and be eligible for Medicare upon attainment of age 65. We assumed 60% of active members are married. Husbands are assumed to be four years older than their wives. Married participants were assumed to elect dual coverage.

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

Patient Protection and Affordable Care Act (PPACA)

High Cost Plan Excise Tax (“Cadillac Tax”): Effective in 2020, there will be a 40% excise tax on per capita medical benefit costs in excess of certain thresholds, which (in 2018) are $10,200 for single coverage and $27,500 for family coverage for Medicare eligible retirees. Thresholds (in 2018) 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 equal the inflation assumption.

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.

Actuarial Assumptions
Teachers, Administrators, Education Assistants

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

Discount Rate

7.5% per annum.

The discount rate is based on the expected long-term return of plan assets for OPEB plans that are funding.

Inflation

2.75%. (Prior: 3.00%)

This assumption is based on long term 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.

The assumption was changed to better reflect expected experience.

Mortality

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 BB.

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

Mortality Improvement

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

We are using Scale BB because it was developed for use with RP-2000.

Assumed Rates of Retirement (from CT State TRS 2016 OPEB Valuation)

	Eligible for Normal (Unreduced) Retirement (Age 60 and 20 Yrs. Serv. or 35 yrs. Serv.		Eligible for Early (Reduced) Retirement (Age 55 and 20 Yrs. Serv. or 25 yrs. Serv.	
Age	**Male**	**Female**	**Male**	**Female**
50	27.5%	27.5%	1.0%	1.0%
51	27.5	27.5	1.0	1.3
52	27.5	27.5	1.0	1.8
53	27.5	27.5	2.0	2.3
54	27.5	27.5	3.0	2.8
55	38.5	27.5	4.0	4.8
56	38.5	27.5	6.0	6.3
57	38.5	27.5	7.0	6.8
58	38.5	27.5	8.0	7.3
59	38.5	27.5	11.0	8.5
60	22.0	27.5		
61-62	25.3	27.5		
63-64	27.5	27.5		
65	36.3	32.5		
66-69	27.5	32.5		
70-79	100.0	32.5		
80	100.0	100.0		

Service-Based Withdrawal Rates (until eligible to retire) (from CT State TRS 2016 OPEB Valuation)

Service	Male Rate	Female Rate
0-1	.1400	.1200
1-2	.1100	.1050
2-3	.0800	.0875
3-4	.0650	.0750
4-5	.0450	.0675
5-6	.0350	.0600
6-7	.0300	.0525
7-8	.0275	.0475
8-9	.0250	.0425
9-10	.0250	.0400
10 +	use age-related rates until eligible to retire	

Sample Age-Based Withdrawal Rates (until eligible to retire) (from CT State TRS 2016 OPEB Valuation)

Age	Male Rate	Female Rate
25-34	.0150	.0400
35	.0150	.0350
40	.0150	.0230
45	.0159	.0150
50	.0204	.0200
55	.0344	.0250
59+	.0400	.0290

Non-service-connected disability

Age	Male Rate	Female Rate
25	.0005	.0005
30	.0004	.0004
35	.0004	.0004
40	.0005	.0007
45	.0014	.0012
50	.0047	.0026
55	.0086	.0044
>=60	.0100	.0050

The actuarial assumptions in regards to rates of decrements above are based on the rates used by the State of Connecticut Teachers' Retirement Plan.

Health Care Cost Trend Rates

7.5% for 2016, decreasing 0.5% per year, to an ultimate rate of 4.5% for 2022 and later.

Health care trend rates reflect both the current and long-term outlook for increases in health care costs. The short term trend rate is based on recent industry surveys, plan experience and near-term expectations. The long term trend rate is based on our general inflation assumption plus an adjustment to reflect expectations for long-term medical inflation.

Additional Assumptions

50% of males and 50% of females assumed married, with wives assumed to be four years younger than their husbands.

Percentage of Actives Eligible at Retirement who continue with Medical Coverage

100%.

Percentage of non-Medicare eligible Teachers Continuing After 65

20%.

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

Unit Costs

	2016
Pre-65 & Non Medicare Eligible	$11,244
Medicare A & B Coordinated	8,771
Medicare B Coordinated	11,179

Allocation rates were used as the basis for per capita costs. The average allocation rates were derived by reflecting participation among various plans offered by the employer.

Sample per capita claims

Sample Age	Expected Claim (Male)	Expected Claim (Female)
45	$6,906	$9,626
50	9,019	11,217
55	11,835	13,067
60	15,246	15,240
65	19,412	18,473
70	23,352	21,606
75	26,798	24,253

The sample per capita claim for plans not integrated with Medicare was developed as follows: Using the total count of active participants eligible for post-retirement medical benefits and retirees currently electing medical coverage in a non-medicare supplement plan, we calculate the total projected claims by multiplying the total count by the average annual premium. Using the cost increases derived from a study sponsored by the Society of Actuaries prepared by Dale H. Yamamoto from May 2013: “Health Care Costs from Birth to Death”, we allocate the total projected claims by age and gender.

(Prior: The sample per capita claim for plans not integrated with Medicare was developed as follows: Using the total count of active participants eligible for post-retirement medical benefits and retirees currently electing medical coverage in a non-medicare supplement plan, we calculate the total projected claims by multiplying the total count by the average annual premium. Using the cost increases derived from a study sponsored by the Society of Actuaries prepared by J.P. Petertil from August 1, 2003: “Aging Curves for Health Care Costs in Retirement”, we allocate the total projected claims by age.)

For plans integrated with Medicare, the post Medicare eligible premium is assumed to be unaffected by age.

The per capita claims method was changed to reflect the most recent study.

Patient Protection and Affordable Care Act (PPACA)

High Cost Plan Excise Tax (“Cadillac Tax”): Effective in 2020, there will be a 40% excise tax on per capita medical benefit costs in excess of certain thresholds, which (in 2018) are $10,200 for single coverage and $27,500 for family coverage for Medicare eligible retirees. Thresholds (in 2018) 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 equal the inflation assumption.

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 Plan Provisions
City

This exhibit summarizes the major provisions of the Plan. It is not intended to be, nor should it be interpreted as a complete statement of all plan provisions. To the extent that this summary does not accurately reflect the plan provisions, then the results of this valuation may not be accurate.

Plan identification

Single-employer OPEB plan

Retirement Eligibility

Police: 20 years of service.

Firefighters: 20 years of service, or;
Age 48 with 20 years of service if hired after January 1, 1981.

CERF: Age 50 and 25 years of service, or;
Age 58 and 15 years of service (except for UE hired after 7/1/2012 and non-grandfathered UAW after 1/1/2015), or;
Age 60 and 10 years of service, or;
25 years of service for MAA only.

Medical

CERF Existing Retirees: Various cost shares as provided by the City via the retiree census data.

CERF Future Retirees: Cost shares as detailed in **Appendix A**.

Life Insurance

Firefighters: The City shall provide and pay for a life insurance policy in the face amount of $4,000.00 for each retired employee.

Police: For current and future retirees, the liability for life insurance has been transferred to the Police pension plan.

CERF: In general, for those current and future retirees still eligible for retiree life insurance, the liability is being transferred to the CERF pension plan.

Medicare Part B

For current and future retirees, the liability for Medicare Part B reimbursement has been transferred to the respective pension plans.

Summary of Plan Provisions
Board of Education

Teachers

Eligibility for Medical & Dental Coverage:

Age 50 with 25 years of service, or;
Age 55 with 20 years of service, or;
Age 60 with 10 years of service.

Retiree Contributions: 50% of the premium for the earlier of 3 consecutive years or age 65, if hired prior to 7/1/2010 and have attained age 45, 15 years of service and 70 points as of July 1, 2016. Full premium thereafter.

Full premium for all others (not eligible as of July 1, 2016, as per above).

Administrators

Eligibility for Medical & Dental Coverage:

Age 50 with 25 years of service, or;
Age 55 with 20 years of service, or;
Age 60 with 10 years of service.

Retiree Contributions (Current Retirees): Board pays full cost until participant reaches age 65 if have attained 15 years of service and 70 points.

Retiree Contributions (Future Retirees – effective July 1, 2013): Retirees shall pay 50% of the cost until age 65.

After age 65, participant pays full cost.

Life Insurance:

Benefit: 2 times compensation for deaths prior to age 65.

Retiree Contributions: None.

Custodians

Eligibility for Medical Coverage:

25 years of service, or;
Age 60 and 10 years of service.

All employees hired after July 1, 2011 are not eligible for retiree medical.

Medicare Part B: For current and future retirees, the liability for Medicare Part B reimbursement has been transferred to the respective pension plans.

Retiree Contributions (Current Retirees):

Cost to age 65: To receive medical coverage, the employee must pay one-third (33.33%) and the City will pay two-thirds (66.66%) of the cost of such plan.

Cost Post 65: The retiree must pay two-thirds (66.66%) of the cost for the supplemental coverage.

Retiree Contributions (Future Retirees – effective July 1, 2011):

Cost to age 65: To receive medical coverage, the employee must pay one-half (50.00%) and the City will pay one-half (50.00%) of the cost of such plan.

Cost Post 65: The retiree must pay 100.0% of the cost for the supplemental coverage.

Life Insurance:

Benefit: $6,000.

Retiree Contributions: None.

Educational Assistants

Eligibility for Medical Coverage:

Age 50 with 25 years of service, or;
Age 55 with 20 years of service, or;
Age 60 with 10 years of service.

Retiree Contributions: Full premium.

Security Workers

Eligibility for Medical Coverage: None.

WPCA Disclosure
WPCA Split

	Total	WPCA	All Others
Total OPEB liability*	$ 354,679,524	$ 5,187,056	$ 349,492,468
Plan fiduciary net position	92,167,012	1,259,080	90,907,932
Net OPEB liability (asset)	$ 262,512,512	$ 3,927,976	$ 258,584,536
Plan fiduciary net position as a % of total OPEB liability	25.99%	24.27%	26.01%
Covered payroll	$ 245,488,525	$ 2,535,297	$ 242,953,229
Net OPEB liability as a % of covered payroll	106.93%	154.93%	106.43%

**Total OPEB liability calculated using the Entry Age Normal Actuarial Cost Method, as required by paragraph 54 of GASB Statement 74.*

WPCA GASB 45

Calculation of Net OPEB Obligation - WPCA	
Annual required contribution	$382,000
Interest on net OPEB obligation	68,000
Adjustment to annual required contribution	(69,000)
Annual OPEB cost (expense)	381,000
Contributions made	(382,000)
Increase in net OPEB obligation	(1,000)
Net OPEB obligation - June 30, 2016	905,000
Net OPEB obligation - June 30, 2017	904,000

History of AOC and NOO

Fiscal Year Ending	Annual OPEB Cost (AOC)	Actual Contribution	Percentage of AOC Contributed	Net OPEB Obligation (NOO)
June 30, 2015	367,000	161,000	44%	868,000
June 30, 2016	366,000	329,000	90%	905,000
June 30, 2017	381,000	382,000	100%	904,000