

CITY OF MERIDEN'S POST-RETIREMENT BENEFITS OTHER THAN PENSION
FOR THE CITY AND BOARD OF EDUCATION EMPLOYEES OPEB PLAN

ACTUARIAL VALUATION REPORT

July 1, 2018

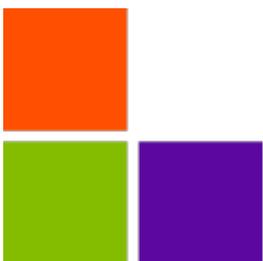




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Certification

This report presents the results of the July 1, 2018 Actuarial Valuation for the City of Meriden's post-retirement benefits other than pension (OPEB) for the City and Board of Education Employees (the Plan) for the purpose of estimating the funded status of the Plan and determining the Actuarially Determined Employer Contribution (ADEC) for the fiscal years ending June 30, 2020 and June 30, 2021. 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 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 City. 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 sections 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 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.

Stephen Chykirda, ASA, FCA, MAAA
Enrolled Actuary 17-07517

August 2, 2019



Executive Summary

The July 1, 2018 accrued liability of \$89,324,019 is lower than anticipated. The gain is primarily due to premiums being lower than expected and lowering the utilization assumption. The gain was offset by updated census data and a decrease in the discount rate. In addition, we made some other assumption changes including Inflation, Mortality, Spousal Coverage and Healthcare Cost Trend Rates, and we refined the per capita claims methodology.

Schedule of Funding Status and Funding Progress						
Actuarial Valuation Date	Actuarial Value of Assets	Actuarial Accrued Liability	Unfunded Accrued Liability (UAL)	Funded Ratio	Covered Payroll	UAL as a Percentage of Covered Payroll
7/1/2012	\$10,416,198	\$80,957,206	\$70,541,008	13%	\$95,772,885	74%
7/1/2014	20,830,636	89,516,332	68,685,696	23%	95,450,755	72%
7/1/2016	26,225,826	80,060,837	53,835,011	33%	99,427,684	54%
7/1/2018	34,506,569	89,324,019	54,817,450	39%	101,259,819	54%

History of Actuarially Determined Employer Contribution (ADEC)	
Year Ended June 30	Actuarially Determined Employer Contribution (ADEC)
2016	\$7,513,565
2017	7,728,391
2018	5,424,655
2019	5,440,438
2020	5,387,249
2021	5,439,065



Unfunded Accrued Liability and Actuarially Determined Employer Contribution

Unfunded Accrued Liability (UAL)						
Actuarial Accrued Liability 7/1/2018	City	Police	Fire	BOE Certified	BOE Non-Certified	Grand Total
Actives	\$12,303,018	\$8,752,003	\$9,113,141	\$3,921,265	\$10,392,836	\$44,482,263
Retirees	<u>14,560,122</u>	<u>6,876,910</u>	<u>5,581,745</u>	<u>10,353,817</u>	<u>7,469,162</u>	<u>44,841,756</u>
Total	26,863,140	15,628,913	14,694,886	14,275,082	17,861,998	89,324,019
Assets 7/1/2018	<u>11,257,555</u>	<u>6,287,023</u>	<u>5,250,422</u>	<u>7,620,544</u>	<u>4,091,025</u>	<u>34,506,569</u>
Unfunded Accrued Liability (UAL) 7/1/2018	15,605,585	9,341,890	9,444,464	6,654,538	13,770,973	54,817,450
Funded Ratio	41.9%	40.2%	35.7%	53.4%	22.9%	38.6%

Actuarially Determined Employer Contribution (ADEC)						
2019 / 2020 Fiscal Year ADEC	City	Police	Fire	BOE Certified	BOE Non-Certified	Grand Total
Normal Cost	\$264,571	\$525,721	\$526,025	\$210,590	\$302,905	\$1,829,812
Employee Contributions	(548,608)	(254,782)	(189,628)	0	(322,278)	(1,315,296)
Amortization of UAL	1,332,641	797,752	806,511	568,265	1,175,974	4,681,143
Interest	<u>38,667</u>	<u>39,408</u>	<u>42,145</u>	<u>28,720</u>	<u>42,650</u>	<u>191,590</u>
Total ADEC 2019 / 2020	1,087,271	1,108,099	1,185,053	807,575	1,199,251	5,387,249
Expected Benefit Payments 2019 / 2020	1,552,314	632,430	573,861	668,281	813,188	4,240,074
ADEC minus EBP 2019 / 2020	(465,043)	475,669	611,192	139,294	386,063	1,147,175
2020 / 2021 Fiscal Year ADEC	City	Police	Fire	BOE Certified	BOE Non-Certified	Grand Total
Normal Cost	\$276,741	\$549,904	\$550,222	\$220,277	\$316,839	\$1,913,983
Employee Contributions	(562,872)	(261,406)	(194,558)	0	(330,657)	(1,349,493)
Amortization of UAL	1,332,641	797,752	806,511	568,265	1,175,974	4,681,143
Interest	<u>38,590</u>	<u>40,055</u>	<u>42,855</u>	<u>29,077</u>	<u>42,855</u>	<u>193,432</u>
Total ADEC 2020 / 2021	1,085,100	1,126,305	1,205,030	817,619	1,205,011	5,439,065
Expected Benefit Payments 2020 / 2021	1,676,541	672,943	658,339	730,360	897,042	4,635,225
ADEC minus EBP 2020 / 2021	(591,441)	453,362	546,691	87,259	307,969	803,840



Unfunded Accrued Liability (UAL)					
Actuarial Accrued Liability 7/1/2018	City	Water	Sewer	Golf	Grand Total
Actives	\$9,808,764	\$1,774,311	\$517,081	\$202,862	\$12,303,018
Retirees	<u>12,699,583</u>	<u>1,409,562</u>	<u>450,977</u>	<u>0</u>	<u>14,560,122</u>
Total	22,508,347	3,183,873	968,058	202,862	26,863,140
Assets 7/1/2018	<u>8,653,659</u>	<u>1,838,364</u>	<u>659,550</u>	<u>105,982</u>	<u>11,257,555</u>
Unfunded Accrued Liability (UAL) 7/1/2018	13,854,688	1,345,509	308,508	96,880	15,605,585
Funded Ratio	38.4%	57.7%	68.1%	52.2%	41.9%
Actuarially Determined Employer Contribution (ADEC)					
2019 / 2020 Fiscal Year ADEC	City	Water	Sewer	Golf	Grand Total
Normal Cost	\$216,221	\$25,459	\$19,611	\$3,280	\$264,571
Employee Contributions	(441,114)	(63,676)	(36,887)	(6,931)	(548,608)
Amortization of UAL	1,183,123	114,900	26,345	8,273	1,332,641
Interest	<u>35,335</u>	<u>2,828</u>	<u>334</u>	<u>170</u>	<u>38,667</u>
Total ADEC 2019 / 2020	993,565	79,511	9,403	4,792	1,087,271
Expected Benefit Payments 2019 / 2020	1,324,208	174,151	52,195	1,760	1,552,314
ADEC minus EBP 2019 / 2020	(330,643)	(94,640)	(42,792)	3,032	(465,043)
2020 / 2021 Fiscal Year ADEC	City	Water	Sewer	Golf	Grand Total
Normal Cost	\$226,167	\$26,630	\$20,513	\$3,431	\$276,741
Employee Contributions	(452,583)	(65,332)	(37,846)	(7,111)	(562,872)
Amortization of UAL	1,183,123	114,900	26,345	8,273	1,332,641
Interest	<u>35,279</u>	<u>2,810</u>	<u>332</u>	<u>169</u>	<u>38,590</u>
Total ADEC 2020 / 2021	991,986	79,008	9,344	4,762	1,085,100
Expected Benefit Payments 2020 / 2021	1,427,729	181,960	63,643	3,209	1,676,541
ADEC minus EBP 2020 / 2021	(435,743)	(102,952)	(54,299)	1,553	(591,441)



Participant Counts and Average Attained Age As of July 1, 2018

Participant Counts			
Group	Active Participants*	Retirees**	Total
City DB	169	197	366
City DC	104	0	104
Police	124	60	184
Fire	99	64	163
BOE Certified	679	59	738
BOE Non-Certified	286	120	406
Total	1,461	500	1,961

*Includes 104 (City) DC participants with flat dollar benefits.

Includes (Police, Fire, BOE) participants with Access Only benefits.

**Does not include spouses of existing retirees.

Average Age		
Group	Active Average Age	Retiree Average Age
City DB	54.4	73.0
City DC	41.7	N/A
Police	39.9	70.1
Fire	42.5	73.0
BOE Certified	42.9	68.9
BOE Non-Certified	52.0	74.9



As of July 1, 2016

Participant Counts			
Group	Active Participants*	Retirees**	Total
City DB	195	201	396
City DC	74	0	74
Police	97	58	155
Fire	99	63	162
BOE Certified	696	58	754
BOE Non-Certified	208	104	312
Total	1,369	484	1,853

*Includes 74 (City) DC participants with flat dollar benefits.

**Does not include spouses of existing retirees.

Average Age		
Group	Active Average Age	Retiree Average Age
City DB	53.4	73.0
City DC	40.7	N/A
Police	43.3	71.1
Fire	42.0	74.1
BOE Certified	43.4	67.7
BOE Non-Certified	54.4	75.4



Projected Benefit Payments

Fiscal Year Beginning July 1st	Currently Active Employees	Currently Retired Employees	Total
2019	\$580,112	\$3,659,961	\$4,240,073
2020	995,530	3,639,696	4,635,226
2021	1,411,690	3,691,946	5,103,636
2022	1,784,664	3,698,986	5,483,650
2023	2,226,880	3,767,560	5,994,440
2024	2,574,059	3,766,770	6,340,829
2025	3,007,924	3,721,484	6,729,408
2026	3,482,207	3,739,633	7,221,840
2027	3,817,247	3,710,430	7,527,677
2028	4,117,350	3,669,643	7,786,993
2029	4,610,466	3,679,349	8,289,815
2030	4,929,765	3,690,747	8,620,512
2031	5,408,570	3,617,961	9,026,531
2032	5,773,922	3,621,423	9,395,345
2033	6,120,664	3,613,857	9,734,521
2034	6,555,688	3,569,520	10,125,208
2035	6,835,016	3,458,022	10,293,038
2036	7,169,103	3,402,671	10,571,774
2037	7,667,819	3,332,781	11,000,600
2038	8,007,695	3,248,430	11,256,125



Description of Actuarial Methods

Asset Valuation Method

Plan Assets equal the Market Value of assets.

Actuarial Cost Method

Changes in Actuarial Cost Method: None.

Description of Current Actuarial Cost Method: Entry Age Normal (level percentage of salary)

Normal Cost: Under this method, the total normal cost is the sum of amounts necessary to fund each active member's normal retirement benefit if paid annually from entry age to assumed retirement age. Entry age is the age at which the employee would have been first eligible for the plan, if it had always been in effect. The normal cost for each participant is expected to remain a level percentage of the employee's salary. The normal cost for the plan is the difference between the total normal cost for the year and the anticipated member contributions for that year.

Past Service Liability: The present value of future benefits that relates to service before the valuation date is the total past service liability. The unfunded past service liability is the difference between the total past service liability and any assets (including accumulated member contributions). This amount is amortized over 28 years on a closed basis as of July 1, 2018.

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 past service liability and are amortized at the same rate the plan is amortizing the remaining unfunded past service liability.



Description of Actuarial Assumptions

Changes in Actuarial Assumptions as of July 1, 2018

The valuation reflects changes in the actuarial assumptions listed below. (The assumptions used before and after these changes are more fully described in the next section.)

- Interest
- Inflation
- Mortality
- Utilization
- Spousal Coverage
- Healthcare Cost Trend Rates
- Expected Claim Costs

The assumptions indicated were changed to represent the Enrolled Actuary's current best estimate of anticipated experience of the plan.

Interest

7.375% (Prior: 7.75%)

Since the OPEB plan's fiduciary net position and future contributions are projected to be sufficient to cover expected benefit payments for current plan members, the long-term expected rate of return on OPEB plan investments was used to discount liabilities.

Salary Scale

Merit tables shown below, plus an annual inflation assumption of 2.60% for all groups.

City and BOE Non-Certified		Fire		Police	
Completed Years of Service	Rate	Completed Years of Service	Rate	Completed Years of Service	Rate
0	7.85%	0	7.85%	0	7.85%
1	4.85	1	5.85	1	6.35
2	3.85	2	3.85	2	4.85
3	2.85	3	1.35	3	3.85
4	2.85	4	1.35	4	1.85
5	2.35	5	1.35	5	0.85
6	1.85	6	1.35	6	0.35
7	1.60	7	1.10	7	0.35
8	1.35	8	1.10	8	0.35
9	1.10	9	1.10	9	0.35
10	0.85	10	1.10	10	0.35
11	0.60	11	1.10	11	0.35
12	0.60	12	1.10	12	0.35
13	0.60	13	0.85	13	0.35
14	0.35	14	0.85	14+	0.10
15	0.10	15+	0.35		
16+	0.00				

BOE Certified: 0% merit, plus an annual inflation assumption of 2.60%.



Salary Scale (cont.)

The actuarial assumptions in regards to rate of compensation increases shown above (except for BOE Certified) are based on the results of an actuarial experience study for the period July 1, 2008 through July 1, 2014.

Inflation

2.60% (Prior: 2.75%)

This assumption is consistent with the Social Security Administration's current best estimate of the ultimate long-term (75-year horizon) annual percentage increase in CPI, as published in the 2018 OASDI Trustees Report.

The assumption was changed to better reflect expected experience.

Mortality

City and BOE Retirements: RP-2014 Adjusted to 2006 Total Dataset Mortality Table, projected to the valuation date with Scale MP-2018.

(Prior City and BOE Retirements: RP-2014 Adjusted to 2006 Total Dataset Mortality Table, projected to the valuation date with Scale MP-2016.)

Police and Fire Retirements: RP-2014 Adjusted to 2006 Blue Collar Mortality Table, projected to the valuation date with Scale MP-2018.

(Prior Police and Fire Retirements: RP-2014 Adjusted to 2006 Blue Collar Mortality Table, projected to the valuation date with Scale MP-2016.)

Disabled mortality

RP-2014 Adjusted to 2006 Disabled Mortality Table, projected to the valuation date with Scale MP-2018.

(Prior: RP-2014 Adjusted to 2006 Disabled Mortality Table, projected to the valuation date with Scale MP-2016.)

Mortality improvement

All: Projected to date of decrement using Scale MP-2018 (generational).

(Prior All: Projected to date of decrement using Scale MP-2016 (generational).)

We have selected this mortality assumption because it is based on one of the latest published retirement mortality studies released by the Society of Actuaries. The group composition of the Plan is consistent with the collar adjustment selected.



Retirement

City and BOE Non-Certified – sample rates:

Age	Completed Years Of Service				
	10	15	20	25	>=30
50	0.00%	0.00%	0.00%	10.00%	15.00%
55	2.50	2.50	3.50	10.00	7.00
60	2.50	2.50	10.00	7.00	10.00
65	15.00	15.00	15.00	35.00	35.00
70	20.00	20.00	20.00	25.00	25.00
75	20.00	20.00	20.00	50.00	50.00
80	100.00	100.00	100.00	100.00	100.00

Fire – sample rates:

Age	Completed Years Of Service			
	<25	25	30	>=35
50	0.00%	5.00%	5.00%	5.00%
55	0.00	20.00	20.00	20.00
60	0.00	20.00	20.00	30.00
65	0.00	100.00	100.00	100.00

Police in City Plan – sample rates:

Age	Completed Years Of Service					
	10	15	20	25	30	>=33
40	0.00%	0.00%	0.00%	50.00%	10.00%	25.00%
45	0.00	0.00	0.00	50.00	10.00	25.00
50	0.00	0.00	0.00	50.00	10.00	25.00
55	0.00	0.00	0.00	50.00	5.00	25.00
60	0.00	0.00	5.00	50.00	25.00	25.00
65	100.00	100.00	100.00	100.00	100.00	100.00

Police in Police Plan – sample rates:

Age	Completed Years Of Service					
	10	15	20	25	30	>=35
40	0.00%	0.00%	50.00%	10.00%	50.00%	25.00%
45	0.00	0.00	50.00	10.00	50.00	25.00
50	0.00	0.00	50.00	10.00	50.00	25.00
55	0.00	0.00	50.00	5.00	50.00	25.00
60	0.00	0.00	50.00	25.00	50.00	25.00
65	100.00	100.00	100.00	100.00	100.00	100.00



Retirement (cont.)

BOE Certified: Per table below (from Connecticut State TRS 2016 OPEB Valuation):

Age	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.)	
	Male	Female	Male	Female
50	27.5%	27.5%	1.00%	1.00
51	27.5	27.5	1.00	1.25
52	27.5	27.5	1.00	1.75
53	27.5	27.5	2.00	2.25
54	27.5	27.5	3.00	2.75
55	38.5	27.5	4.00	4.75
56	38.5	27.5	6.00	6.25
57	38.5	27.5	7.00	6.75
58	38.5	27.5	8.00	7.25
59	38.5	27.5	11.00	8.50
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		

Termination prior to retirement

City and BOE Non-Certified: 70% of the Vaughn Select & Ultimate Withdrawal Table for City employees

Sample rates:

Age	Completed Years Of Service			
	0	1	2	3
20	20.86%	17.50%	14.70%	13.02%
25	19.46	15.75	12.95	9.52
30	18.06	14.00	11.20	7.07
35	16.66	12.46	9.66	5.53
40	15.26	11.06	8.26	4.55
45	13.86	9.87	7.07	3.85
50	12.46	8.82	6.02	3.15
55	0.00	0.00	0.00	0.00

Fire and Police: None



Termination prior to retirement (cont.)

BOE Certified: Rates based on gender and length of service for first ten years and gender and age thereafter (Connecticut State TRS 2016 OPEB Valuation):

Service	Male Rate	Female Rate
0-1	14.00%	12.00%
1-2	11.00	10.50
2-3	8.00	8.75
3-4	6.50	7.50
4-5	4.50	6.75
5-6	3.50	6.00
6-7	3.00	5.25
7-8	2.75	4.75
8-9	2.50	4.25
9-10	2.50	4.00
10 +	use age-related rates until eligible to retire	

Disability

City and BOE Non-Certified: None assumed.

Fire and Police: 1985 OPEB Disability Study Class 4 Unisex Table

BOE Certified – sample rates:

Age	Male Rates	Female Rates
30	.05%	.04%
40	.07	.07
50	.33	.26

The actuarial assumptions in regards to rates of decrement (except for BOE Certified) shown above are based on the results of an actuarial experience study for the period July 1, 2008 through July 1, 2014.

The actuarial assumptions for BOE Certified in regards to rates of decrement shown above are based on rates used by the Connecticut State Teachers' Retirement System actuaries.

Medical Utilization

City, BOE Non-Certified and Fire: 100% of current active members will elect medical coverage at retirement.

Police: For those in the City plan, 100% of current active members will elect medical coverage at retirement. For those in the Police plan, 75% of current active members will elect medical coverage at retirement.

(Prior Police: 100% of current active members will elect medical coverage at retirement.)

BOE Certified: 75% of current active members will elect medical coverage at retirement.

(Prior BOE Certified: 100% of current active members will elect medical coverage at retirement.)

100% of pre-65 retirees will continue coverage after age 65.

The utilization rate was changed for Police in the Police plan and BOE Certified to better reflect actual experience.



Medicare Eligibility

80% of current Certified BOE members hired prior to April 1, 1986 and 100% of All Others are assumed to be Medicare Eligible.

Note: For some current retirees, actual Medicare eligibility information, provided by the City, was used.

Spousal Coverage

City and BOE Non-Certified: 65% of male and 50% of female active members are assumed to be married and elect spousal benefits at retirement with wives three years younger than husbands.

(Prior City and BOE Non-Certified: 75% of male and 65% of female active members are assumed to be married and elect spousal benefits at retirement with wives three years younger than husbands.

Fire and Police: 75% of active members are assumed to be married and elect spousal benefits at retirement with wives three years younger than husbands.

BOE Certified: 35% of active members are assumed to be married and elect spousal benefits at retirement with wives three years younger than husbands.

(Prior BOE Certified: 50% of active members are assumed to be married and elect spousal benefits at retirement with wives three years younger than husbands.)

The spousal coverage rates were changed for City, BOE Non-Certified and BOE Certified to better reflect actual experience.

Healthcare Cost Trend Rates

7.25% in 2018, reducing by 0.5% each year to a final 4.60% per year rate for 2024 and later.

(Prior: 7.25% in 2018, reducing by 0.5% each year to a final 4.75% per year rate for 2023 and later.)

Dental is assumed to increase by 3.50% per year. (Prior: 5.00%).

Healthcare cost trend rates reflect both the current and long-term outlook for increases in healthcare costs. The short term rates are 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.

The trend rates were changed to align with the inflation assumption change.

Premiums/Allocation rates

	Employee	Employee & Spouse
City HSA	\$825.70	\$1,653.28
City PPO	1,030.20	2,062.26
P&F HSA	832.14	1,666.14
P&F PPO	1,060.90	2,123.67
BOE Non-Certified HSA	824.03	1,649.83
BOE Non-Certified PPO	1,055.21	2,112.70
BOE Certified HSA	814.69	1,631.17
BOE Certified PPO	1,027.60	2,056.99
Medicare Surround Plan D	189.16	378.32
Express Scripts Rx Plan	210.25	420.50
Dental	49.28	128.10

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



Expected Claim Costs

HSA Plan		
Sample Age	Expected Claim (Male)	Expected Claim (Female)
45	\$6,318	\$8,806
50	8,250	10,260
55	10,826	11,953
60	13,947	13,941
64	17,032	16,321

PPO Plan	
Expected Claim (Male)	Expected Claim (Female)
\$7,972	\$11,111
10,410	12,947
13,661	15,082
17,598	17,591
21,491	20,594

Express Scripts Rx Plan		
Sample Age	Expected Claim (Male)	Expected Claim (Female)
65	\$2,141	\$2,029
70	2,455	2,324
75	2,669	2,535
80	2,807	2,680
85	2,824	2,698

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.

Note: This process was done separately for the HSA plans and for the PPO plans. For City employees, we assumed they will stay in their current plan (HSA or PPO) upon retirement. For non-City employees, we assumed 100% will be in the HSA plan upon retirement.

The sample per capita claim for the Express Scripts Rx Plan was developed as follows: Using the total count of retirees currently electing medical coverage in a Medicare supplement plan, we calculate the total projected claims by multiplying the total count by the 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.

For the Medicare Surround Plan D, the post Medicare eligible premium is assumed to be unaffected by age. The per capita claims method was refined to better reflect the nature of the plan offerings.



Patient Protection and Affordable Care Act (PPACA)

High Cost Plan Excise Tax ("Cadillac Tax"): Effective in 2022, 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

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

Plan types

The non-Medicare medical plans are self-insured. There are HSA and PPO plan options available to City retirees, although most other participants cannot enroll in the PPO plan unless they are ineligible for the HSA plan or pay a full buy-up.

The Medicare Supplement plan is comprised of two separate plans: the medical plan "Cigna Medicare Surround Plan D" and the Rx plan "Express Scripts Rx Plan". The medical plan is fully insured and the Rx piece is self-insured.

Active cost share

HSA plans: 10%-13%.

PPO plan (City): 20% or 22%, unless precluded by law.

City Plan

Eligibility for retiree medical coverage

15 years of service and Rule of 80.

Retiree cost for medical

Retiree pays same as active employees for medical coverage until age 65. Retiree pays nothing for coverage after age 65.

Spouse cost for medical

Spouse pays 50% of the cost plus retiree cost share percentage above, until age 65. Spouse pays 100% for coverage after age 65 (except spouses of department heads that pay nothing after age 65).

Retiree/Spouse dental

Prior to age 65 only, with same cost share as medical.

Death benefit

\$1,000, increasing to \$5,000 in 2015.

Employee contribution

Active employees contribute 11.0% of pay, split between Pension and OPEB at the City's discretion. 4.0% going towards the OPEB trust.

New hires

Employees hired on/after 7/1/2011 with 25 years of service and at least age 65, receive \$1,000 towards post-65 coverage. No active employee contribution going towards the OPEB trust for this group.



Police in Police Plan

Eligibility for retiree medical coverage

20 years of service and hired before March 2003.

Disabled Eligibility for retiree medical coverage

10 years of service

Retiree/Spouse medical (retirement prior to 2003)

Retiree receives only emolument and pays 100% for coverage for retiree and spouse at all ages.

Retiree/Spouse medical (retirement 2003-2008)

Retiree receives either emolument or 100% city paid coverage for retiree and spouse at all ages.

Retiree/Spouse medical (retirement post-1/1/2009)

Retiree receives either emolument or 100% city paid coverage (less cost share detailed below) for retiree and spouse at all ages.

Retiree cost for medical (retirement post-1/1/2009)

Retiree pays same as active employees for medical coverage until age 65. Retiree pays nothing for coverage after age 65.

Spouse cost for medical (retirement post-1/1/2009)

With 20 years of service: Spouse pays 50% of the cost until age 65. Spouse pays nothing after age 65.

With 25 years of service: Spouse pays same as retiree.

Retiree/Spouse dental

None.

Death benefit

None.

Employee contribution

Active employees contribute 10.0% of pay, split between Pension and OPEB at the City's discretion. 2.5% going towards the OPEB trust.

Police in City Plan

Eligibility for retiree medical coverage

25 years of service and hired after March 2003. (Those hired prior to March 2003 are under the Police Plan).

Disabled Eligibility for retiree medical coverage

10 years of service

Retiree cost for medical

Retiree pays same as active employees for medical coverage until age 65. Retiree pays nothing for coverage after age 65.

Spouse cost for medical

Spouse pays 50% of the cost plus retiree cost share percentage above, until age 65. Spouse pays 100% for coverage after age 65.



Retiree/Spouse dental

Prior to age 65 only, with same cost share as Medical.

Death benefit

\$1,000.

Employee contribution

Active employees contribute 10.0% of pay, split between Pension and OPEB at the City's discretion. 4.0% going towards the OPEB trust.

New hires

Employees hired on/after 7/1/2012 with 25 years of service or at least age 65, are eligible for Access Only retiree medical coverage. No active employee contribution going towards the OPEB trust for this group.

Fire in Fire Plan

Eligibility for retiree medical coverage

25 years of service and hired before March 2003.

Disabled Eligibility for retiree medical coverage

10 years of service

Retiree/Spouse medical (retirement prior to 2003)

Retiree receives only emolument and pays 100% for coverage for retiree and spouse at all ages.

Retiree/Spouse medical (retirement after 2003)

Retiree receives either emolument or 100% city paid coverage (less cost share detailed below) for retiree and spouse at all ages.

Retiree cost for medical (retirement after 2003)

Retiree pays same as active employees for medical coverage until age 65. Retiree pays nothing for coverage after age 65.

Spouse cost for medical (retirement after 2003)

Spouse pays retiree cost share percentage above, until age 65. Spouse pays nothing for coverage after age 65.

Retiree/Spouse dental

None.

Death benefit

None.

Employee contribution

Active employees contribute 6.0% of pay, split between Pension and OPEB at the City's discretion. 2.0% going towards the OPEB trust.

Fire in City Plan

Eligibility for retiree medical coverage

25 years of service and hired after March 2003. (Those hired prior to March 2003 are under the Fire Plan).



Disabled Eligibility for retiree medical coverage

10 years of service

Retiree cost for medical

Retiree pays same as active employees for medical coverage until age 65. Retiree pays nothing for coverage after age 65.

Spouse cost for medical

Spouse pays 50% of the cost plus retiree cost share percentage above, until age 65. Spouse pays nothing for coverage after age 65.

Retiree/Spouse dental

Prior to age 65 only, with same cost share as Medical.

Death benefit

\$1,000

Employee contribution

Active employees contribute 6.0% of pay, split between Pension and OPEB at the City's discretion. 2.5% going towards the OPEB trust.

New hires

Employees hired on/after 7/1/2016 with 25 years of service or at least age 65, are eligible for Access Only retiree medical coverage. No active employee contribution going towards the OPEB trust for this group.

Board of Education – Non Certified

Eligibility for retiree medical coverage

15 years of service and Rule of 80.

Retiree cost for medical

Retiree pays same as active employees for medical coverage until age 65. Retiree pays nothing for coverage after age 65.

Spouse cost for medical

Spouse pays 50% of the cost plus retiree cost share percentage above, until age 65. Spouse pays 100% for coverage after age 65.

Retiree/Spouse dental

Prior to age 65 only, with same cost share as Medical.

Death benefit

\$1,000

Employee contribution

Active employees contribute 8.0% of pay, split between Pension and OPEB at the City's discretion. 4.0% going towards the OPEB trust.

New hires

Employees hired on/after 7/1/2011 with 25 years of service and at least age 65, are eligible for Access Only retiree medical coverage. No active employee contribution going towards the OPEB trust for this group.



Board of Education – Certified

Eligibility for retiree medical coverage

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

Disabled Eligibility for retiree medical coverage

5 years of service

Retiree/Spouse medical

The retiree must pay 100% of the cost for medical coverage for themselves or their spouse, at all ages.

Retiree/Spouse dental

Prior to age 65 only, with same cost share as Medical.

Death benefit

None.