nyhart

City of Newport Beach

OPEB Actuarial Valuation
Retiree Health Program
As of June 30, 2017

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SECTION I. EXECUTIVE SUMMARY

Background

The City of Newport Beach (the "City") selected Nyhart to perform an updated actuarial valuation of its retiree health program. The purpose of the valuation is to measure the City's liability for OPEB benefits and to determine recommended actuarially determined contributions (ADCs) for the fiscal periods ending June 30, 2019 and June 30, 2020. The ADC is a target or recommended contribution to a defined benefit OPEB plan for the applicable period, determined in accordance with parameters set by the City and in conformity with Actuarial Standards of Practice. The valuation results will also serve as the basis for complying with GASB 75 for the fiscal year ending June 30, 2018.

Effective January 1, 2006, the City implemented a Retiree Health Savings program (RHS Plan) for all new full-time employees and for full-time employees whose age plus years of service as of January 1, 2006 was less than 46 for public safety employees and 50 for all other employees. A Hybrid Plan was provided for full-time active employees whose age plus years of service as of January 1, 2006 was 46 or more for public safety employees and 50 or more for all other employees (unless opting into the RHS Plan). Employees in the Hybrid Plan continue to be eligible to receive the City's fixed dollar contribution under the prior defined benefit plan at retirement but the contribution is paid into the employee's RHS account. Employees already retired and eligible for a City contribution at January 1, 2006 also continue to receive the City's fixed dollar contribution under the prior defined benefit plan but instead of being applied towards medical coverage, the fixed dollar contribution amount less the PEMHCA minimum required employer contribution for those continuing coverage through PEMHCA is made to an RHS account established for the retiree. Part-time employees retiring from the City can elect to continue medical coverage through PEMHCA and receive a City contribution equal to the PEMHCA minimum required employer contribution.

As of the valuation date there are 539 retirees receiving the City's flat dollar contribution plus 32 retirees receiving the PEMHCA minimum required contribution. There are also 88 active employees under the Hybrid Plan eligible to receive the City's flat dollar contribution in the future if retiring from the City. In addition, there are 103 part-time employees who may become eligible to continue coverage through PEMHCA at retirement. The remaining 591 employees participate in the RHS Plan. The City may be responsible for the PEMHCA minimum required contribution if these employees retire from the City and continue coverage under PEMHCA.

The City participates in the CalPERS Health Program for its retiree medical coverage. In general, the premium rates charged to participating employers are the same for each medical plan within each region (or "community") and are the same for both active and retired employees covered under the same medical plan. An implied rate subsidy can exist when the non-Medicare rates for retirees are the same as for active employees. Since non-Medicare eligible retirees are typically much older than active employees, their actual medical costs are typically higher than for active employees. Both GASB accounting standards and actuarial standards of practices (ASOPs) require that implied rate subsidies be considered in the valuation of medical costs. This valuation includes an estimate of the liability for the implicit rate subsidy.

Section IV of the report provides a full description of the plan provisions that were included in the valuation and the current premium costs for coverage.

Results of the Retiree Health Valuation

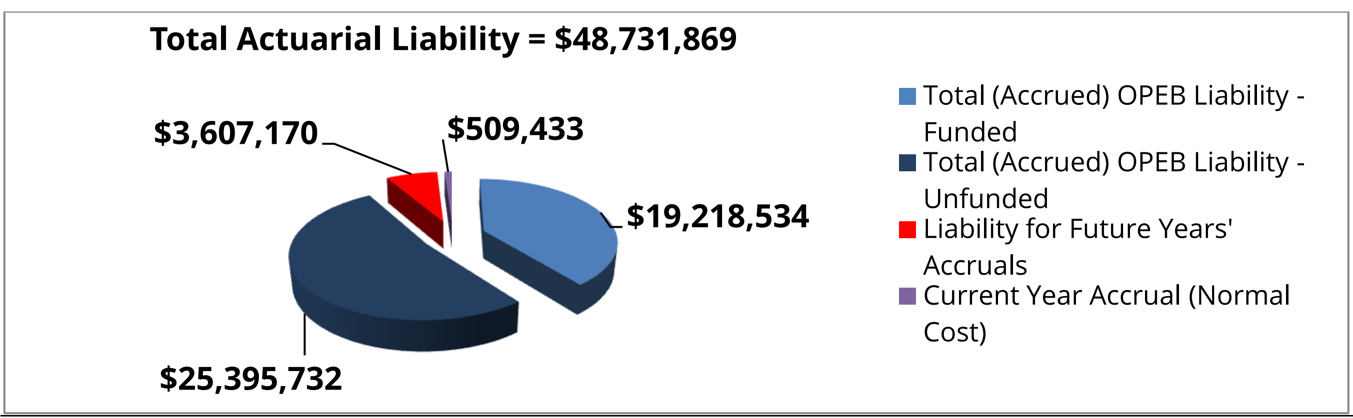
We have determined the amount of the present value of the projected City contributions (actuarial liability) for OPEB benefits, as of June 30, 2017, the valuation date, is $48,730,869 (including $39,762,062 for the City's explicit contribution and $8,968,807 for the implicit rate subsidy). This value is based on an assumed discount rate of 6.5%. The amount represents the present value of all benefits projected to be paid by the City for current and future retirees. If the City were to have this amount in a fund earning interest at the rate of 6.5% per year, and all other actuarial assumptions were met, the fund would have enough to pay the City's required contribution for retiree health benefits. This includes benefits for the current retirees as well as the current active employees expected to retire in the future. The valuation does not consider employees not yet hired as of the valuation date.

If the amount of the actuarial liability is apportioned into past service, current service and future service components; the past service component (actuarial accrued liability now referred to as Total OPEB Liability) is $44,614,266 (including $37,407,353 for the City's explicit contribution and $7,206,913 for the implicit rate subsidy), the current service component (normal cost or current year accrual) is $509,433 (including $322,560 for the City's explicit contribution and $186,873 for the implicit rate subsidy) and the future service component (not yet accrued liability) is $3,607,170 (including $2,032,149 for the City's explicit contribution and $1,575,021 for the implicit rate subsidy).

Changes from Prior Valuation

The valuation reflects updated premium, plan and census information. In addition, there were several assumption and method changes including updates to the healthcare costs and trends and a lowering of the discount rate to 6.5% for CERBT investment strategy 1. A reconciliation of the approximate change in the liabilities from the prior valuation is provided below:

Present Value of City Contributions (Actuarial Liability) at June 30, 2015 @7.0%	**$47,414,000**
Decrease due to passage of time	(552,000)
Decrease due to more favorable experience	(1,209,000)
Increase due to new entrants	422,000
Increase due to updates to the initial healthcare trend	82,000
Increase due to lowering the discount rate to 6.5%	2,575,000
Present Value of City Contribution (Actuarial Liability) at June 30, 2017 @6.5%	**$48,731,000**
Portion attributable to current year accrual or normal cost	(509,000)
Portion of liability not yet accrued or future normal cost accruals	(3,607,000)
Total (Accrued) OPEB Liability at June 30, 2017 @6.5%	**$44,614,000**
Actuarial Value of Plan Assets (Funded Portion)	(19,218,000)
Net (Unfunded Accrued) OPEB Liability at June 30, 2017 @6.5%	**$25,396,000**



Plan Assets

The City pre-funds the OPEB benefits through the California Employers' Retiree Benefit Trust (CERBT) through the CERBT under investment strategy 1. The market value of assets as of June 30, 2017 is $19,078,995. For funding purposes, the City has selected an asset smoothing method to determine the actuarial value of assets. The smoothing method recognized any asset gains or losses over 5 years recognizing 20% per year. The actuarial value of assets at June 30, 2017 is $19,218,534. The Net (unfunded) OPEB Liability at June 30, 2017 is $25,395,732. The Plan's funded ratio (actuarial value of assets over Total OPEB Liability) is 43%.

Actuarially Determined Contribution (ADC)

The recommended actuarially determined contribution (ADC) is determined based on the normal cost (current accrual for benefits being earned) plus an amortization of the net (unfunded accrued) OPEB liability over 10 years (on a level-dollar basis). The recommended ADC is equal to $3,834,916 (or 5.15% of payroll) for the fiscal year ending June 30, 2019 and includes $2,618,419 for the City's explicit contribution and $1,216,497 for the implicit rate subsidy. The projected ADC for the fiscal year ending June 30, 2020 is $3,852,251.

The estimated City direct contribution amount for retiree health benefits for the 2017-18 fiscal year is $3,443,987 (including $632,353 for the implicit rate subsidy). This amount includes payments for employees expected to retire during the 2017-18 fiscal year.

Actuarial Basis

The actuarial valuation is based on the assumptions and methods outlined in Section VII of the report. To the extent that a single or a combination of assumptions is not met, the future liability may fluctuate significantly from its current measurement. As an example, the healthcare cost increase anticipates that the rate of increase in medical cost will be at moderate levels and decline over several years. Increases higher than assumed would bring larger liabilities and expensing requirements. Another key assumption used in the valuation is the discount (interest) rate which is based on the expected rate of return of plan assets. Sensitivity for a 1% increase and decrease in the healthcare trend rates and for a 1% increase and decrease in the discount rate is provided in Section II-J.

Scheduled to take effect in 2020, the "Cadillac Tax" is a 40% non-deductible excise tax on employer-sponsored health coverage that provides high-cost benefits. For insured plans, the insurance company is responsible for payment of the excise tax. For self-funded plans, the employer is responsible for payment of the excise tax. The valuation excludes any additional liability for the Cadillac Tax as based on current provisions the amount would be de minimis.

The valuation is based on the census, plan and rate information provided by the City. To the extent that the data provided lacks clarity in interpretation or is missing relevant information, this can result in liabilities different than those presented in the report. Often missing or unclear information is not identified until future valuations.

SECTION II. FINANCIAL RESULTS

A. Valuation Results

The table below presents the employer liabilities associated with the City's retiree health benefits. The actuarial liability is the present value of all City contributions projected to be paid under the program. The total OPEB liability (TOL), previously referred to as the actuarially accrued liability, reflects the amount attributable to the past service of current employees and retirees. The normal cost reflects the accrual attributable for the current period and includes interest.

	Miscellaneous	Safety	Total
1. Actuarial Liability or Present Value of Benefits			
Actives	$ 8,486,108	$ 5,730,143	$14,216,251
Retirees	17,228,140	17,286,478	34,514,618
Total	$25,714,248	$23,016,621	$48,730,869
Explicit Contribution	$21,368,646	$18,393,416	$39,762,062
Implicit Contribution	$ 4,345,602	$ 4,623,205	*$ 8,968,807*
2. Total OPEB Liability (TOL)			
Actives	$ 6,475,454	$ 3,624,194	$10,099,648
Retirees	17,228,140	17,286,478	34,514,618
Total	$23,703,594	$20,910,672	$44,614,266
Explicit Contribution	$20,113,303	$17,294,050	$37,407,353
Implicit Contribution	$ 3,590,291	$ 3,616,622	$ 7,206,913
3. Normal Cost	$ 286,455	$ 222,978	$ 509,433
Explicit Contribution	$ 192,763	$ 129,797	$ 322,560
Implicit Contribution	$ 93,692	$ 93,181	*$ 186,873*
No. of Active Employees			782
Average Age			42.8
Average Past Service			12.7
No. of Retired Employees			571
Average Age			67.8
Average Retirement Age			54.6

*Counts exclude 103 retirees waiving coverage and not receiving any City contribution

B. Reconciliation of Market Value of Plan Assets

The reconciliation of Plan Assets for the last two fiscal years is presented below:

	Fiscal Year Ending 6/30/2016	Fiscal Year Ending 6/30/2017
1. Beginning Market Value of Assets	$14,818,836	$16,131,814
2. Contribution	3,845,895	3,925,087
3. Fund Earnings (gross)	228,906	1,881,482
4. Benefit Payments	(2,748,781)	(2,843,721)
5. Investment Expenses	(5,508)	(6,617)
6. Administrative Expenses	(7,534)	(9,050)
7. Ending Market Value of Assets	$16,131,814	$19,078,995
8. Estimated Return on Assets	1.45%	11.25%

C. <u>Development of Actuarial Value of Assets</u>

The actuarial value of assets is based on the expected market value appreciation. The actual market appreciation or depreciation, both realized and unrealized, is phased in over five years as the expected growth is phased out. The table below presents the development of the actuarial value of assets.

		6/30/2014	6/30/2015	6/30/2016	6/30/2017	
1	Market value of assets					$19,078,995
2	Actual rate of return	18.09%	(0.29%)	1.45%	11.25%	
3	Expected rate of return	7.25%	7.25%	7.00%	7.00%	
4	Actual fund earnings	$2,118,149	(43,051)	$ 223,398	$1,874,865	4,173,361
5	Expected fund earnings	849,095	1,079,197	1,075,261	1,166,527	4,170,088
6	Gain(loss) [(4) - (5)]	1,269,054	(1,122,248)	($ 851,863)	$ 708,338	
7	Percent of gain/(loss) recognized 6/30/2017	80%	60%	40%	20%	
8	Recognized gain/(loss) [(6) x (7)]	$1,015,243	($ 673,354)	($ 340,745)	$ 141,668	$ 142,812
9.	Blended value of assets at 6/30/2017 [(1) - (4) + (5) + (8)]					$19,218,534
10.	Percent increase/(decrease) of (9) over (1)					0.73%
11.	Actuarial value of assets, not more than 120% nor less than 80% of market value					$19,218,534

D. <u>Development of Actuarial Value of Assets</u>

The actuarial value of assets is based on the market value of assets plus any contribution receivable or benefits payable. The actuarial value of assets at June 30, 2017 is $19,218,534.

E. <u>Net (Unfunded Accrued) OPEB Liability (NOL) at June 30, 2017</u>

The table below presents the development of the net OPEB liability previously referred to as the unfunded actuarial accrued liability. The net OPEB liability is the excess of the TOL over the actuarial value of plan assets.

	Explicit	Implicit	Total
1. Total (Accrued) OPEB Liability	$37,407,353	$7,206,914	$44,614,267
2. Actuarial Value of Assets	(19,218,534)	(0)	(19,218,534)
3. Net (Unfunded Accrued) OPEB Liability (NOL)	$18,188,819	$7,206,914	$25,395,733

F. <u>Projected Actuarial Value of Assets @June 30, 2018</u>

The table below presents the development of the expected actuarial value of assets at June 30, 2016 for purposes of developing the annual required contribution.

1. Actuarial Value of Assets at June 30, 2017	$19,218,534
2. Expected Fund Earnings @6.5%	1,268,667
3. Expected City Contributions*	4,042,840
4. Expected Benefit Payments & Expenses*	(3,443,987)
5. Projected Actuarial Value of Assets at June 30, 2018	$21,086,054

* Based on projected City contributions equal to $4,042,840 and reimbursements for direct payments for benefits and implicit rate subsidies equal to $3,443,987.

G. Development of Net OPEB Liability (NOL) at June 30, 2018

The table below presents the development of the net OPEB liability previously referred to as the unfunded actuarial accrued liability. The net OPEB liability is the excess of the TOL over the actuarial value of plan assets.

	Explicit	Implicit	Total
1. Total (Accrued) OPEB Liability	$37,279,345	$7,221,478	$44,500,823
2. Actuarial Value of Assets	(21,086,054)	(0)	(21,086,054)
3. Net (Unfunded Accrued) OPEB Liability (NOL)	$16,193,291	$7,221,478	$23,414,769

H. Amortization of NOL

The amortization of the NOL component of the actuarially determined contribution (ADC) is being amortized over a period of 10 years on a level-dollar basis. Under the level-dollar method, the amortization payment is scheduled to remain constant in future years.

1. NOL	$16,193,291	$ 7,221,478	$23,414,769
2. Amortization Factor	7.18883	7.18883	7.18883
3. Amortization of NOL	$ 2,252,563	$ 1,004,541	$ 3,257,104

I. Actuarially Determined Contribution (ADC)

The table below presents the development of the actuarially determined contribution (ADC) for the fiscal year ending June 30, 2019 and for the fiscal years ending June 30, 2020.

	Explicit	Implicit	Total
FY2018/2019			
1. Normal Cost	$ 365,856	$ 211,956	$ 577,812
2. Amortization of NOL	2,252,563	1,004,541	3,257,104
3. Actuarially Determined Contribution (ADC)	$ 2,618,419	$ 1,216,497	$ 3,834,916
4. Estimated Payroll	$74,485,000	$74,485,000	$74,485,000
5. ADC as % of Payroll	3.52%	1.63%	5.15%
FY2019/2020			
1. Normal Cost	$ 376,832	$ 218,315	$ 595,147
2. Amortization of NOL	2,252,563	1,004,541	3,257,104
3. Actuarially Determined Contribution (ADC)	$ 2,629,395	$ 1,222,856	$ 3,852,251
4. Estimated Payroll	$76,719,000	$76,719,000	$76,719,000
5. ADC as % of Payroll	3.43%	1.59%	5.02%

J. Sensitivity Analysis:

The impact of a 1% decrease and increase in the discount (interest) rate and the impact of a 1% increase and decrease in future healthcare trend rates on the City's actuarial liability, TOL, NOL and the ADC is provided below:

	Dollar ($) Increase/ (Decrease)	Percentage (%) Increase/ (Decrease)
1% Decrease in Discount Rate		
- Actuarial Liability	$6,025,497	12%
- TOL	$4,582,874	10%
- NOL	$4,582,874	18%
- ADC	$ 586,690	15%
1% Increase in Discount Rate		
- Actuarial Liability	($4,907,431)	(10%)
- TOL	($3,877,497)	(9%)
- NOL	($3,877,497)	(15%)
- ADC	($ 511,489)	(13%)
1% Increase in Future Healthcare Trend Rates		
- Actuarial Liability	$ 3,070,186	6%
- TOL	$ 2,054,410	5%
- NOL	$ 2,054,410	8%
- ADC	$ 895,488	23%
1% Decrease in Future Healthcare Trend Rates		
- Actuarial Liability	($2,174,216)	(4%)
- TOL	($1,421,030)	(3%)
- NOL	($1,421,030)	(6%)
- ADC	($ 297,612)	(8%)

K. Alternative Results: Alternative Discount Rate

The table below shows the impact on the liability and annual required contributions using a higher discount rate of 7.0%.

As of June 30, 2017	Explicit Contribution	Implicit Rate Subsidy	Total
1. Actuarial Liability (AL)			
Actives	$ 8,270,622	$ 4,760,340	$13,030,962
Retirees	29,382,189	3,742,970	33,125,159
Total AL	$37,652,811	$ 8,503,310	$46,156,121
2. Actuarial Accrued Liability (AAL)			
Actives	$ 6,255,403	$ 3,216,304	$ 9,471,707
Retirees	29,382,189	3,742,970	33,125,159
Total AAL	$35,637,592	$ 6,959,274	$42,596,866
3. Actuarial Value of Assets	(19,218,534)	(0)	(19,218,534)
4. Unfunded AAL (UAAL)	$16,419,058	$ 6,959,274	$23,378,332
Projected to June 30, 2018			
1. Actuarial Accrued Liability (AAL)	$35,528,105	$ 6,973,639	$42,501,744
2. Actuarial Value of Assets	(21,086,054)	(0)	(21,086,054)
3. Unfunded AAL (UAAL)	$14,442,051	$ 6,973,639	$21,415,690
4. Amortization Factor	7.02358	7.02358	7.02358
5. Amortization of UAAL	$ 2,056,223	$ 992,889	$ 3,049,113
2018/2019 Recommended ADC			
1. Normal Cost at End of Year	$ 327,337	$ 194,420	$ 521,757
2. Amortization of UAAL at End of Year	2,056,223	992,889	3,049,113
3. Recommended ADC	$ 2,383,560	$ 1,187,309	$ 3,570,870
4. Expected Payroll	$74,485,000	$74,485,000	$74,485,000
5. City ARC as % of Payroll	3.20%	1.59%	4.79%
2019/2020 Annual Required Contribution			
1. Normal Cost at End of Year	$ 337,157	$ 200,253	$ 537,410
2. Amortization of UAAL at End of Year	2,056,223	992,889	3,049,112
3. Recommended ADC	$ 2,393,380	$ 1,193,142	$ 3,586,522
4. Expected Payroll	$74,556,000	$74,556,000	$74,556,000
5. City ARC as % of Payroll	3.12%	1.56%	4.67%

SECTION III. PROJECTED CASH FLOWS

The valuation process includes the projection of the expected benefits (including the explicit City contribution and the implicit rate subsidy) to be paid by the City under its retiree health benefits program. This expected cash flow takes into account the likelihood of each employee reaching age for eligibility to retire and receive health benefits. The projection is performed by applying the turnover assumption to each active employee for the period between the valuation date and the expected retirement date. Once the employees reach their retirement date, a certain percent are assumed to enter the retiree group each year. Employees already over the latest assumed retirement age as of the valuation date are assumed to retire immediately. The per capita cost as of the valuation date is projected to increase at the applicable healthcare trend rates both before and after the employee's assumed retirement. The projected per capita costs are multiplied by the number of expected future retirees in a given future year to arrive at the cash flow for that year. Also, a certain number of retirees will leave the group each year due to expected deaths or reaching a limit age and this group will cease to be included in the cash flow from that point forward. Because this is a closed-group valuation, the number of retirees dying each year will eventually exceed the number of new retirees, and the size of the cash flow will begin to decrease and eventually go to zero.

The expected cash flows for selected future years are provided in the table on the following page. These cash flows do not reflect the employee contributions that will be paid by Hybrid Plan active employees in future years. The estimated implicit rate subsidies are also provided.

Projected Employer Total Cash Flows – Representative Years

Fiscal Year	Explicit	Implicit	City Total
2017/18	$ 2,811,634	$ 632,353	$ 3,443,987
2018/19	$ 2,860,223	$ 626,021	$ 3,486,244
2019/20	$ 2,897,929	$ 631,255	$ 3,529,184
2020/21	$ 2,921,439	$ 653,895	$ 3,575,334
2021/22	$ 2,937,762	$ 668,334	$ 3,606,096
2022/23	$ 2,946,193	$ 659,444	$ 3,605,637
2023/24	$ 2,945,455	$ 658,679	$ 3,604,134
2024/25	$ 2,937,570	$ 662,844	$ 3,600,414
2025/26	$ 2,921,220	$ 647,863	$ 3,569,083
2026/27	$ 2,902,502	$ 658,996	$ 3,561,498
2027/28	$ 2,877,305	$ 658,973	$ 3,536,278
2028/29	$ 2,847,716	$ 648,951	$ 3,496,667
2029/30	$ 2,815,881	$ 629,091	$ 3,444,972
2030/31	$ 2,781,253	$ 606,391	$ 3,387,644
2031/32	$ 2,742,198	$ 581,657	$ 3,323,855
2032/33	$ 2,701,373	$ 543,250	$ 3,244,623
2033/34	$ 2,656,089	$ 533,005	$ 3,189,094
2034/35	$ 2,608,505	$ 547,938	$ 3,156,443
2035/36	$ 2,559,404	$ 550,094	$ 3,109,498
2036/37	$ 2,507,603	$ 540,050	$ 3,047,653
2037/38	$ 2,452,666	$ 571,855	$ 3,024,521
2038/39	$ 2,395,573	$ 613,326	$ 3,008,899
2039/40	$ 2,335,873	$ 656,057	$ 2,991,930
2040/41	$ 2,274,175	$ 655,587	$ 2,929,762
2041/42	$ 2,209,618	$ 689,561	$ 2,899,179
2042/43	$ 2,143,465	$ 732,656	$ 2,876,121
2043/44	$ 2,076,106	$ 726,364	$ 2,802,470
2044/45	$ 2,008,534	$ 689,365	$ 2,697,899
2045/46	$ 1,941,260	$ 684,822	$ 2,626,082
2050/51	$ 1,700,077	$ 416,782	$ 2,116,859
2055/56	$ 1,444,066	$ 150,001	$ 1,594,067
2060/61	$ 1,177,622	$ 11,662	$ 1,189,284
2065/66	$ 935,209	$ -	$ 935,209
2070/71	$ 720,326	$ -	$ 720,326
2075/76	$ 508,748	$ -	$ 508,748
2080/81	$ 300,162	$ -	$ 300,162
2085/86	$ 134,830	$ -	$ 134,830
2090/91	$ 41,665	$ -	$ 41,665
2095/96	$ 7,557	$ -	$ 7,557
2100/01	$ -	$ -	$ -
All Years	$114,638,959	$22,605,182	$137,244,141

SECTION IV. BENEFIT PLAN PROVISIONS

This study analyzes the post-retirement health benefits provided by the City. Currently, eligible active employees are offered a choice of medical (including prescription drug coverage) plans through the CalPERS Health Program under the Public Employees' Medical and Hospital Care Act (PEMHCA). The City offers the same medical plans to eligible retirees except once a retiree is eligible for Medicare, the retiree must join a Medicare HMO or Supplement Plan with Medicare being the primary payer.

Prior to January 1, 2006, the City sponsored a defined benefit healthcare plan which provided a fixed dollar contribution towards the cost of medical coverage for eligible employees continuing medical coverage through PEMHCA at retirement. The City's contribution varied by employee group (up to a maximum of $450 per month for Police employees and $400 for all other employees).

Effective January 1, 2006, the City implemented a Retiree Health Savings program (RHS) for all new full-time employees (Category 1) and for full-time employees whose age plus service as of January 1, 2006 was less than 46 for public safety employees and 50 for all other employees (Category 2). Full-time active employees whose age plus service as of January 1, 2006 was 46 or more for public safety employees and 50 or more for all other employees (Category 3) continued to be eligible to receive the City's fixed dollar contribution under the prior defined benefit plan at retirement but the contribution is paid into the employee's RHS account. Employees already retired and eligible for a City contribution at January 1, 2006 (Category 4) continued to receive the City's contribution under the prior defined benefit plan but instead of being applied towards medical coverage, the fixed dollar contribution amount less the minimum required employer PEMHCA contribution for those continuing coverage through PEMHCA is made to an RHS account established for the retiree. Employees in Category 3 could make a one-time election to be treated similarly to Category 2 employee with those not electing remaining in a Hybrid Plan (includes both the City's fixed dollar contribution but also some components of the RHS Plan). A description of the funding components is outlined in the chart on the following page.

The RHS is a Health Reimbursement Arrangement (HRA) sponsored by the City which reimburses a participant for post-employment medical (PEMHCA plan) dental, vision, long-term care, miscellaneous medical expenses, and the PEMHCA minimum. In general, the RHS is a defined contribution program sponsored by the City with several funding components as outlined in the table on the following page. Any balance in the employee's RHS account after the death of the employee and eligible spouse and dependents will be forfeited.

Part-time employees can continue medical coverage through PEMHCA and receive the PEMHCA minimum required contribution from the City which is scheduled to increase in the future based on the medical portion of CPI. A history of the increases in past years and current amounts are as follows:

Calendar Year	Minimum Required Employer Contribution
2009	$101.00
2010	$105.00
2011	$108.00
2012	$112.00
2013	$115.00
2014	$119.00
2015	$122.00
2016	$125.00
2017	$128.00
2018	$133.00
2019+	Adjusted Annually to reflect Medical Portion of CPI

In general, the RHS is a defined contribution program sponsored by the City with the following funding components:

	Category 1	Category 2	Category 3*	Category 4
Part A – Pre-Retirement Employee Contributions	o 1% of base pay mandatory contribution o effective immediately upon employment	o 1% of base pay mandatory contribution o effective January 1, 2006	o 1% of base pay mandatory contribution o effective January 1, 2006	None
Part B – Pre-Retirement City Contributions:	o City contributes $2.50 per month for each year of age plus service during employment o effective upon 5 years of vesting service; immediate vesting for industrial disability o retroactively deposited; biweekly thereafter	o City contributes $2.50 per month for each year of age plus service during employment o effective upon 5 years of vesting service; immediate vesting for industrial disability o retroactively deposited; biweekly thereafter	None	None
Part C – Leave Conversion:	o mandatory transfer of a portion of accumulated leave during any leave buyout o amount of leave conversion varies by bargaining unit & subject to negotiation o not payable in cash	o mandatory transfer of a portion of accumulated leave during any leave buyout o amount of leave conversion varies by bargaining unit & subject to negotiation o not payable in cash	o mandatory transfer of a portion of accumulated leave during any leave buyout o amount of leave conversion varies by bargaining unit & subject to negotiation o not payable in cash	
Part D – Conversion Contribution:	None	o For fully converted employees who retire from the plan only o City will make a one-time contribution of $100 per month the employee contributed to the plan prior to January 1, 2006 with a cap of $18,000	o City will make a one-time contribution of $75 per month the employee contributed to the plan January 1, 2006 with a cap of $13,500	
Part E – Post Retirement Contribution	o City will provide the PEMHCA minimum contribution when a retiree's RHS account value has been exhausted	o City will provide the PEMHCA minimum contribution when a retiree's RHS account value has been exhausted	o City will contribute $400 per month ($450 for Police employees retiring prior to January 1, 2006)	o City will contribute $400 per month ($450 for Police employees) to retiree's or surviving spouse's RHS account
Part F – Other Pre-Retirement Employee Contributions:	None	None	o Active full-time employees are required to make a contribution of $100 per month	None

*Employees making a one-time election into the RHS Plan are treated as Category 2 employees.

Premium Rates

The City participates in the CalPERS Health Program, a community-rated program, for medical coverage. The tables below summarize the calendar 2017 and 2018 monthly medical premiums for the primary medical plans in which the retirees are enrolled.

2017 Other So. Cal. Region	Kaiser	BS HMO	PERSCare	PERSChoice	PERS Select
Retiree Only	$ 599.54	$ 778.45	$ 802.24	$ 714.43	$ 633.46
Retiree Plus Spouse	$1,199.08	$1,556.90	$1,604.48	$1,428.86	$1,266.92
Retiree Plus Family	$1,558.80	$2,023.97	$2,085.82	$1,857.52	$1,647.00
Retiree Only- Medicare	$ 300.48	N/A	$ 389.76	$ 353.63	$ 353.63
Retiree Plus Spouse – Medicare	$ 600.96	N/A	$ 779.52	$ 707.26	$ 707.26

2017 Other So. Cal. Region (Continued)	Sharp HMO	UHC HMO	Anthem HMO Select	Anthem HMO Traditional	Health Net Salud	Health Net Smart Care
Retiree Only	$ 614.46	$ 549.76	$ 659.03	$ 799.15	$ 473.46	$ 537.20
Retiree Plus Spouse	$1,228.92	$1,099.52	$1,318.06	$1,598.30	$ 946.92	$1,074.40
Retiree Plus Family	$1,597.60	$1,429.38	$1,713.48	$2,077.79	$1,231.00	$1,396.72
Retiree Only- Medicare	N/A	$ 324.21	N/A	N/A	N/A	N/A
Retiree Plus Spouse – Medicare	N/A	$ 648.42	N/A	N/A	N/A	N/A

2018 Other So. Cal. Region	Kaiser	BS HMO	PERSCare	PERSChoice	PERS Select
Retiree Only	$ 666.80	$ 695.97	$ 733.50	$ 698.96	$ 654.74
Retiree Plus Spouse	$1,333.60	$1,391.94	$1,467.00	$1,397.92	$1,309.48
Retiree Plus Family	$1,733.68	$1,809.52	$1,907.10	$1,817.30	$1,702.32
Retiree Only- Medicare	$ 316.34	N/A	$ 382.30	$ 345.97	$ 345.97
Retiree Plus Spouse – Medicare	$ 632.68	N/A	$ 764.60	$ 691.94	$ 691.94

2018 Other So. Cal. Region (Continued)	Sharp HMO	UHC HMO	Anthem HMO Select	Anthem HMO Traditional	Health Net Salud	Health Net Smart Care
Retiree Only	$ 618.14	$ 616.66	$ 659.69	$ 735.08	$ 461.56	$ 607.68
Retiree Plus Spouse	$1,236.28	$1,233.32	$1,319.38	$1,470.16	$ 923.12	$1,215.36
Retiree Plus Family	$1,607.16	$1,603.32	$1,715.19	$1,911.21	$1,200.06	$1,579.97
Retiree Only- Medicare	N/A	$ 330.76	N/A	N/A	N/A	N/A
Retiree Plus Spouse – Medicare	N/A	$ 661.52	N/A	N/A	N/A	N/A

SECTION V. VALUATION DATA

The valuation was based on the census furnished to us by the City. A reconciliation and summary data statistics as of the Valuation Date are provided in the following tables:

Age Distribution of Eligible Retired Participants & Beneficiaries

	Miscellaneous	Safety	Total*	MRC Only	Waives	Grand Total
<50	0	1	1	5	10	16
50-54	6	17	23	4	12	39
55-59	39	34	73	4	15	92
60-64	52	64	116	9	12	137
65-69	67	55	122	4	12	138
70-74	50	40	90	4	16	110
75-79	35	21	56	1	12	69
80-84	22	16	38	0	8	46
85+	17	3	20	1	24	45
Total:	288	251	539	32	121	692
Average Age:	69.6	66.6	68.2	60.6	69.1	68.0
Average Retirement Age:	57.5	51.5	54.7	53.8	50.6	53.9

* Note: Currently receiving the $400 or $450 per month contribution.

Age/Service Distribution of All Active Benefit Eligible Employees

Age	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	Total	Hybrid Plan	RHS Plan	Part Time
20-24	26									26	0	10	16
25-29	57	19								76	0	51	25
30-34	42	41	28	1						112	0	98	14
35-39	20	33	59	26	3					141	0	131	10
40-44	17	6	33	26	9	2				93	0	90	3
45-49	10	15	19	43	11	11	1			110	3	101	6
50-54	9	9	14	24	18	31	14			119	34	75	10
55-59	2	6	11	8	7	12	5	3		54	23	26	5
60-64	3	3	4	5	4	6	5	3		33	20	6	7
65-69	3	3	1	2	0	1	2	0	1	13	5	3	5
70+	1	0	0	1	0	2	1	0	0	5	3	0	2
Total:	190	135	169	136	52	65	28	6	1	782	88	591	103
Average Age:										42.8	57.3	41.3	39.1
Average Service:										12.7	27.2	11.5	7.5

Age/Service Distribution of Benefit Eligible Miscellaneous Employees

Age	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	Total	Hybrid Plan	RHS Plan	Part Time
20-24	22									22	0	6	16
25-29	39	13								52	0	29	23
30-34	19	17	17							53	0	40	13
35-39	15	21	26	11	1					74	0	65	9
40-44	15	3	17	14	3					52	0	49	3
45-49	10	13	12	24	7	7				73	2	67	4
50-54	9	8	14	21	9	23	8			92	20	62	10
55-59	2	6	11	7	5	11	4	3		49	18	26	5
60-64	3	3	4	5	4	6	4	2		31	18	6	7
65-69	3	3	1	2	0	1	1	0	1	12	5	3	4
70+	1	0	0	1	0	2	1	0	0	5	3	0	2
Total:	138	87	102	85	29	50	18	5	1	515	66	353	96
Average Age										44.4	58.5	43.3	39.0
Average Service										12.7	27.2	11.6	6.7

Age/Service Distribution of Benefit Eligible Safety Employees

Age	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	Total	Hybrid Plan	RHS Plan	Part Time
20-24	4									4	0	4	0
25-29	18	6								24	0	22	2
30-34	23	24	11	1						59	0	58	1
35-39	5	12	33	15	2					67	0	66	1
40-44	2	3	16	12	6	2				41	0	41	0
45-49	0	2	7	19	4	4	1			37	1	34	2
50-54	0	1	0	3	9	8	6			27	14	13	0
55-59	0	0	0	1	2	1	1			5	5	0	0
60-64	0	0	0	0	0	0	1	1		2	2	0	0
65-69	0	0	0	0	0	0	1	0	0	1	0	0	1
70+	0	0	0	0	0	0	0	0	0	0	0	0	0
Total:	52	48	67	51	23	15	10	1	0	267	22	238	7
Average Age										39.0	53.7	38.3	41.0
Average Service										11.7	27.0	11.4	18.1

SECTION VI. ACTUARIAL ASSUMPTIONS AND METHODS

The liabilities set forth in this report are based on the actuarial assumptions described in this section.

Fiscal Year: July 1st to June 30th

Valuation Date: June 30, 2017

Funding Periods Covered: FY2018/19 and FY2019/20

Funding Policy: The actuarially determined contribution (ADC) assuming the City's funding strategy is to fund the normal cost (current accrual for benefits being earned) plus an amortization of the net (unfunded accrued) OPEB liability over 10 years.

Expected Rate of Return: 6.5% per annum. This discount rate assumes the City continues to fully fund for its retiree health benefits through the California Employers' Retiree Benefit Trust (CERBT) under its investment allocation strategy 1. The rate reflects the CERBT published median interest rate for strategy 1 of 7.28% with an additional margin for adverse deviation.

Discount Rate: 6.5% per annum.

Sensitivity analysis showing a 1% increase or decrease in the discount rate is also provided.

Inflation: 2.75% per annum

Payroll Increases: 3.0% per annum, in aggregate

Merit Increases: Merit increases from the most recent CalPERS pension plan experiences study. The benefits are not payroll related but each individual's projected cost is allocated over their lifetime as a level-percentage of pay.

Wage Inflation: 3.0% per annum, in aggregate.

Salary Increases: For cost method purposes the merit increases from the CalPERS pension plan are used.

Pre-retirement Turnover: According to the termination rates under the CalPERS pension plan. Sample rates for Miscellaneous employees are as follows:

	Entry Age			
Service	20	30	40	50
0	17.42%	16.06%	14.68%	13.32%
5	8.68%	7.11%	5.54%	0.97%
10	6.68%	5.07%	0.71%	0.38%
15	5.03%	3.47%	0.23%	0.04%
20	3.70%	0.21%	0.05%	0.01%
25	2.29%	0.05%	0.01%	0.01%
30	0.05%	0.01%	0.01%	0.01%

Sample rates for Firefighter employees are as follows:

	Entry Age			
Service	**20**	**30**	**40**	**50**
0	9.5%	9.5%	9.5%	9.5%
5	2.6%	2.6%	2.6%	1.0%
10	0.9%	0.9%	0.3%	0.3%
15	0.8%	0.8%	0.2%	0.2%
20	0.7%	0.2%	0.2%	0.2%
25	0.6%	0.1%	0.1%	0.1%
30	0.1%	0.1%	0.1%	0.1%

Sample rates for Safety employees are as follows:

	Entry Age			
Service	**20**	**30**	**40**	**50**
0	10.1%	10.1%	10.1%	10.1%
5	2.5%	2.5%	2.5%	0.9%
10	1.8%	1.8%	0.5%	0.5%
15	1.1%	1.1%	0.3%	0.3%
20	0.8%	0.2%	0.2%	0.2%
25	0.7%	0.1%	0.1%	0.1%
30	0.1%	0.1%	0.1%	0.1%

Pre-retirement Mortality:

According to the pre-retirement mortality rates under the CalPERS pension plan updated to reflect the most recent experience study. Sample deaths per 1,000 employees applicable to employees are as follows:

Age	**Males**	**Females**
25	0.4	0.2
30	0.5	0.3
35	0.6	0.4
40	0.8	0.5
45	1.1	0.7
50	1.6	1.0
55	2.3	1.4
60	3.1	1.8

Post-retirement Mortality:

According to the post-retirement mortality rates under the CalPERS pension plan updated to reflect the most recent experience study. Sample deaths per 1,000 employees applicable to Miscellaneous and Safety retirees are as follows:

Age	Males	Females
55	6.0	4.2
60	7.1	4.4
65	8.3	5.9
70	13.1	9.9
75	22.1	17.2
80	39.0	29.0
85	69.7	52.4
90	129.7	98.9

Sample deaths per 1,000 employees applicable to industrial disabled retirees are as follows:

Age	Males	Females
55	6.0	4.2
60	7.5	5.2
65	11.2	8.4
70	16.4	14.0
75	28.3	23.2
80	49.0	39.1
85	76.8	62.5
90	129.7	98.9

Disability Rates:

According to the disability rates under the CalPERS pension plan updated to reflect the most recent experience study. Sample industrial disabilities per 1,000 employees:

Age	Miscellaneous	Safety	Firefighter
25	0.0	3.2	1.2
30	0.0	6.4	2.5
35	0.0	9.7	3.7
40	0.0	12.9	4.9
45	0.0	16.1	6.1
50	0.0	19.2	7.4
55	0.0	66.8	72.1

Retirement Rates:

According to the retirement rates under the CalPERS pension plan updated to reflect the most recent experience study as follows:

Miscellaneous Employees
Tier 1 – 2.5%@ Age 55
Tier 2 – 2.0%@ Age 60
Tier 3 – 2.0%@ Age 62

Fire Employees
Tier 1 – 3.0%@ Age 50
Tier 2 – 2.0%@ Age 50
Tier 3 – 2.7%@ Age 57

Safety Employees
Tier 1 – 3.0%@ Age 50
Tier 2 – 3.0%@ Age 55
Tier 3 – 2.7%@ Age 57

Participation Rates:

100% of eligible full-time employees under the Hybrid Plan are assumed to participate at retirement with 65% assumed to continue coverage through PEMHCA. 18% of eligible part-time employees are assumed to elect to continue coverage under PEMHCA at retirement. For employees in the RHS Plan, the City is responsible for the PEMHCA minimum required contribution but may be eligible for reimbursement by the retiree from their individual RHS account. For purposes of the valuation, 35% of employees in the RHS Plan are assumed to continue coverage under PEMHCA at retirement with the City paying the full PEMHCA minimum required contribution.

Spouse Coverage: 60% of future retirees are assumed to cover their spouse. Male spouses are assumed to be 3 years older than female spouses. Actual spouse coverage and spouse ages are used for current retirees.

Waived Retiree Re-election: 20% of the current retiree population currently under 65 re-elect PEMHCA plan at age 65; 0% of those currently over age 65 re-elect.

Claim Cost Development: The valuation claim costs are based on the premiums paid for medical insurance coverage. The City participates in CalPERS, a community rated plan. An implicit rate subsidy can exist when the non-Medicare rates for retirees are the same as for active employees. Since non-Medicare eligible retirees are typically much older than active employees, their actual medical costs are typically higher than for active employees. The current valuation contains an estimate of the implicit rate subsidy.

Medical Trend Rates: Medical costs are adjusted in future years by the following trends:

Year	PPO	HMO
2018	Actual	Actual
2019	7.0%	6.5%
2020	6.5%	6.0%
2021	6.0%	5.5%
2022	5.5%	5.0%
2023+	5.0%	5.0%

[The prior valuation assumed 0.5% lower initial trend rates.]

Minimum Contribution: The PEMHCA minimum required contribution is assumed to increase 4.0% per year.

Fixed Dollar Contribution: Assumed to remain constant in future years.

Medicare Participation: Assume 100% participation.

Actuarial Cost Method: The actuarial cost method used to determine the allocation of the retiree health actuarial liability to the past (accrued), current and future periods is the Entry Age Normal (EAN) cost method. The EAN cost method is a projected benefit cost method which means the "cost" is based on the projected benefit expected to be paid at retirement.

The EAN normal cost equals the level annual amount of contribution from the employee's date of hire (entry date) to their retirement date that is sufficient to fund the projected benefit. For plans unrelated to pay, the normal cost is calculated to remain level in dollars; for pay-related plans the normal cost is calculated to remain level as a percentage of pay. The City has elected to determine the EAN normal cost as a level percentage of pay. The EAN actuarial accrued liability equals the present value of all future benefits for retired and current employees and their beneficiaries less the portion expected to be funded by future normal costs.

All employees eligible as of the measurement date in accordance with the provisions of the Plan listed in the data provided by the City were included in the valuation.

Actuarial Value of Assets:	The valuation assumes investment gains and losses are smoothed over a 5-year period. The actuarial value of assets shall be no less than 80% of the market value of assets and shall be no more than 120% of the market value of assets.
Amortization of NOL:	The unfunded actuarial accrued or net OPEB liability (NOL) is being amortized over 10 years using a level-dollar method. Future bases will be layered in on the same basis.
CalPERS Pension Plan	The rates used are from the CalPERS 1997-2011 Experience Study.

SECTION VII. ACTUARIAL CERTIFICATION

This report summarizes the actuarial valuation for the City of Newport Beach (the “City”) as of June 30, 2017. The purpose of the valuation is to measure the City’s liability for OPEB benefits and to determine an actuarially determined contribution (ADC) for the fiscal periods ending June 30, 2018 and June 30, 2019. The ADC is a target or recommended contribution to a defined benefit OPEB plan for the applicable period, determined in accordance with the parameters and in conformity with Actuarial Standards of Practice. The valuation results will also serve as the basis for complying with GASB 75 applicable for the fiscal year ending June 30, 2018.

To the best of our knowledge, the report presents a fair position of the funded status of the plan. The valuation is based upon our understanding of the plan provisions as summarized within the report. The information presented herein is based on the actuarial assumptions and substantive plan provisions summarized in this report and participant information and asset information furnished to us by the Plan Sponsor. We have reviewed the employee census provided by the Plan Sponsor for reasonableness when compared to the prior information provided but have not audited the information at the source, and therefore do not accept responsibility for the accuracy or the completeness of the data on which the information is based. When relevant data may be missing, we may have made assumptions we feel are neutral or conservative to the purpose of the measurement. We are not aware of any significant issues with and have relied on the data provided.

The discount rate and other economic assumptions have been selected by the Plan Sponsor. Demographic assumptions have been selected by the Plan Sponsor with the concurrence of Nyhart. In our opinion, the actuarial assumptions are individually reasonable and in combination represent our estimate of anticipated experience of the Plan. All calculations have been made in accordance with generally accepted actuarial principles and practice.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as 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); and
- changes in plan provisions or applicable law.

While some sensitivity analysis was provided in the report, we did not perform an analysis of the potential range of future measurements due to the limited scope of our engagement.

To our knowledge, there have been no significant events prior to the current year's measurement date or as of the date of this report that could materially affect the results contained herein.

Neither Nyhart nor any of its employees has any relationship with the plan or its sponsor that could impair or appear to impair the objectivity of this report. Our professional work is in full compliance with the American Academy of Actuaries "Code of Professional Conduct" Precept 7 regarding conflict of interest. The undersigned meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Should you have any questions please do not hesitate to contact me.

Certified by:

Marilyn K. Jones, ASA, EA, MAAA, FCA
Consulting Actuary

Date: October 31, 2017

SECTION VIII. DEFINITIONS

The definitions of the terms used in the actuarial valuations are noted below.

Actuarial Assumptions – Assumptions as to the occurrence of future events affecting health care costs, such as: mortality, turnover, disablement and retirement; changes in compensation and Government provided health care benefits; rates of investment earnings and asset appreciation or depreciation; procedures used to determine the Actuarial Value of Assets; characteristics of future entrants for Open Group Actuarial Cost Methods; and other relevant items.

Actuarial Cost Method – A procedure for determining the Actuarial Present Value of Future Benefits and expenses and for developing an actuarially equivalent allocation of such value to time periods, usually in the form of a Service Cost and a Total (Accrued) OPEB Liability.

Actuarially Determined Contribution - A target or recommended contribution to a defined benefit OPEB plan for the reporting period, determined in accordance with the parameters and in conformity with Actuarial Standards of Practice.

Annual OPEB Cost – An accrual-basis measure of the periodic cost of an employer's participation in a defined benefit OPEB plan.

Actuarial Present Value (also referred to as Actuarial Liability) – The value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of Actuarial Assumptions. For purposes of this standard, each such amount or series of amounts is:

a. adjusted for the probable financial effect of certain intervening events (such as changes in coverage, marital status, etc.);
b. multiplied by the probability of the occurrence of an event (such as survival, death, disability, termination of employment, etc.) on which the payment is conditioned; and
c. discounted according to an assumed rate (or rates) of return to reflect the time value of money.

Deferred Outflow / (Inflow) of Resources – represents the following items that have not been recognized in the OPEB Expense:

a. Differences between expected and actual experience of the OPEB plan
b. Changes in assumptions
c. Differences between projected and actual earnings in OPEB plan investments (for funded plans only)

Explicit Subsidy – The difference between (a) the amounts required to be contributed by the retirees based on the premium rates and (b) actual cash contribution made by the employer.

Funded Ratio – The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

Healthcare Cost Trend Rate – The rate of change in the per capita health claims costs over time as a result of factors such as medical inflation, utilization of healthcare services, plan design, and technological developments.

Implicit Rate Subsidy – In an experience-rated healthcare plan that includes both active employees and retirees with blended premium rates for all plan members, the difference between (a) the age-adjusted premiums approximating claim costs for retirees in the group (which, because of the effect of age on claim costs, generally will be higher than the blended premium rates for all group members) and (b) the amounts required to be contributed by the retirees.

Normal Cost – The portion of the Actuarial Present Value of plan benefits and expenses which is allocated to a valuation year by the Actuarial Cost Method.

OPEB – Benefits (such as death benefits, life insurance, disability, and long-term care) that are paid in the period after employment and that are provided separately from a pension plan, as well as healthcare benefits paid in the period after employment, regardless of the manner in which they are provided. OPEB does not include termination benefits or termination payments for sick leave.

OPEB Expense – Changes in the Net OPEB Liability in the current reporting period, which includes Service Cost, interest cost, changes of benefit terms, expected earnings on OPEB Plan investments, reduction of active employees' contributions, OPEB plan administrative expenses, and current period recognition of Deferred Outflows / (Inflows) of Resources.

Pay-as-you-go – A method of financing a benefit plan under which the contributions to the plan are generally made at about the same time and in about the same amount as benefit payments and expenses becoming due.

Per Capita Costs – The current cost of providing postretirement health care benefits for one year at each age from the youngest age to the oldest age at which plan participants are expected to receive benefits under the plan.

Present Value of Future Benefits – Total projected benefits include all benefits estimated to be payable to plan members (retirees and beneficiaries, terminated employees entitled to benefits but not yet receiving them, and current active members) as a result of their service through the valuation date and their expected future service. The actuarial present value of total projected benefits as of the valuation date is the present value of the cost to finance benefits payable in the future, discounted to reflect the expected effects of the time value (present value) of money and the probabilities of payment. Expressed another way, it is the amount that would have to be invested on the valuation date so that the amount invested plus investment earnings will provide sufficient assets to pay total projected benefits when due.

Real Rate of Return – the rate of return on an investment after adjustment to eliminate inflation.

Select and Ultimate Rates – Actuarial assumptions that contemplate different rates for successive years. Instead of a single assumed rate with respect to, for example, the healthcare trend rate assumption, the actuary may apply different rates for the early years of a projection and a single rate for all subsequent years. For example, if an actuary applies an assumed healthcare trend rate of 6.5% for year 20W0, 6.0% for 20W1, 5.5% for 20W2, then 5.0% for 20W3 and thereafter, then 6.5%, 6% and 5.5% are select rates, and 5% is the ultimate rate.

Service Cost (also referred to as Normal Cost) – The portion of the Actuarial Present Value of projected benefit payments that are attributed to a valuation year by the Actuarial Cost Method.

Substantive Plan – The terms of an OPEB plan as understood by the employer(s) and plan participant.

Total OPEB Liability (also referred to as Actuarial Accrued Liability) – That portion, as determined by a particular Actuarial Cost Method, of the Actuarial Present Value of Future Benefits which is attributed to past periods of employee service (or not provided for by the future Service Costs).