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November 11, 2015

**PRIVATE**

Ms. Susan Giangrande
Budget Manager
City of Newport Beach
One Civic Center Drive
Newport Beach, CA 92660

Re: GASB Actuarial Valuation

Dear Ms. Giangrande:

We are presenting our report of the June 30, 2015 actuarial valuation conducted on behalf of the City of Newport Beach (the "City") for its retiree health program.

The purpose of the valuation is to measure the City's liability for retiree health benefits and to determine the City's accounting requirements under the Government Accounting Standard Board Statements No. 43 & 45 (GASB 43 & 45) in regard to unfunded liabilities for retiree health benefits. The objective of GASB 45 is to improve the information in the financial reports of government entities regarding their post-employment benefits (OPEB) including retiree health benefits. The objective of GASB 43 is to establish uniform reporting for funded OPEB Plans.

The Nyhart Company is an employee owned actuarial, benefits and compensation consulting firm specializing in group health and retiree health and qualified pension plan valuations. We have set forth the results of our study in this report.

We have enjoyed working on this assignment and are available to answer any questions.

Sincerely,
NYHART

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

MKJ:rl

Enclosure

# City of Newport Beach
## Actuarial Valuation
## Retiree Health Program
## As of June 30, 2015

September 2015

Prepared By:

Nyhart
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**City of Newport Beach**

**Retiree Health Benefits Program**

**GASB Actuarial Valuation**

**As of June 30, 2015**

## Table of Contents

## SECTION I. EXECUTIVE SUMMARY

Background

The City of Newport Beach (the "City") selected The Nyhart Company to perform an actuarial valuation of its retiree health program. The purpose of the actuarial valuation is to measure the City's liability for retiree health benefits and to estimate the City's accounting requirements for other post-employment benefits (OPEB) under Governmental Accounting Standards Board Statements No. 43 & 45 (GASB 43 and GASB 45). GASB 45 requires accrual accounting for the expensing of OPEB. The expense is generally accrued over the working career of employees, rather than on a pay-as-you-go basis. GASB 43 requires additional financial disclosure requirements for funded OPEB Plans.

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 Public Employees Medical and Hospital Care Act (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 25 retirees receiving the PEMHCA minimum required contribution. There are also 111 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 88 part-time employees who may become eligible to continue coverage through PEMHCA at retirement. The remaining 579 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 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. GASB 45 requires that implicit rate subsidies be considered in the valuation of medical costs. In past valuations the liability for the implicit rate subsidy was excluded from the valuation as the GASB had provided for an exemption for community-rated plans. 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 that the amount of the actuarial liability for the City's retiree health plan as of June 30, 2015, the measurement date, is $47,414,343 (including $38,297,319 for the City's explicit contribution and $9,117,024 for the implicit rate subsidy). This value is based on an assumed discount rate of 7.0%. 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 place this amount in a fund earning interest at the rate of 7.0% 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) is $42,638,555 (including $35,522,348 for the City's explicit contribution and $7,116,207 for the implicit rate subsidy), the current service component (normal cost or current year accrual) is $610,915 (including $403,729 for the City's explicit contribution and $207,186 for the implicit rate subsidy) and the future service component (not yet accrued liability) is $4,164,873 (including $2,371,242 for the City's explicit contribution and $1,793,631 for the implicit rate subsidy).

## Changes from Prior Valuation

The valuation reflects updated premium, plan and census information. The plan was modified to reduce the City contribution for spouse coverage. In addition, the valuation reflects several assumption changes (as noted in Section VI) including updates to the medical trend rates and bringing in assumptions from the CalPERS experience study for similar groups as the City. A reconciliation of the approximate change from the prior valuation is provided in the following table:

| | |
|---|---|
| **Actuarial Liability at June 30, 2013 @7.25%** | **$38,001,000** |
| Decrease due to passage of time | ( 116,000) |
| Decrease due to more favorable experience | ( 879,000) |
| Increase due to new entrants | 249,000 |
| Increase due to lowering the discount rate to 7.0% | 1,042,000 |
| **Actuarial Liability at June 30, 2015 @7.0% - Without Implicit Liability** | **$38,297,000** |
| Increase due to inclusion of the liability for the implicit rate subsidy | 9,117,000 |
| **Actuarial Liability at June 30, 2015 @7.0% - With Implicit Liability** | **$47,414,000** |
| Portion attributable to current year accrual or normal cost | ( 611,000) |
| Portion of liability not yet accrued or future normal cost accruals | ( 4,164,000) |
| **Actuarial Accrued Liability at June 30, 2015 @7.0% - With Implicit Liability** | **$42,639,000** |

## Annual Required Contribution

The City's annual required contribution (accrual expense) for the 2016/2017 fiscal year is $3,582,661 (net of Hybrid Plan contribution made by active employees and including $1,068,349 for the implicit rate subsidy). The annual required contribution is comprised of the present value of benefits accruing in the current fiscal year (normal cost with interest) plus an 11-year amortization (on a level-percentage of pay basis) of the unfunded actuarial accrued liability. Thus, it represents a means to expense the plan's liabilities in an orderly manner. The change in the net OPEB obligation/(asset) at the end of the fiscal year will reflect any actual contributions made by the City during the period for retiree health benefits including any pre-funding amounts and implicit rate subsidy.

Funding

The City's funding policy is to fund 100% of the annual required contribution as determined under GASB 45 through the California Employers' Retiree Benefit Trust (CERBT). The actuarial value of assets in the CERBT as of June 30, 2015 is $14,890,926. The unfunded actuarial accrued liability (UAAL) at June 30, 2015 is $27,747,629 (including $7,116,207 for the implicit rate subsidy). The funded ratio is 35% at June 30, 2015 (42% for the City's explicit contribution). The UAAL as a percentage of payroll is 39%.

The CERBT provides participating employers with the choice of three investment allocation strategies. The expected rate of return of assets is dependent on the funding strategy of a participating employer and which investment allocation strategy is selected. For employers fully funding their annual required contribution, strategy 1 has a CERBT published median yield of 7.28%, strategy 2 has a published median yield of 6.73% and strategy 3 has a published median yield of 6.12%. The valuation was performed using a 7.0% discount rate assuming the City remains in strategy 1 for the 2016/2017 and 2017/2018 fiscal years and assumes a 0.28% additional margin for adverse deviation applied to the CERBT stated median discount rate. Section II-L of the report provides the results using an alternative discount rate of 6.5%.

Actuarial Basis

The actuarial valuation is based on the assumptions and methods outlined in Section VI 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. A 1% increase in the healthcare trend rate for each future year would increase the annual required contribution by 8%. The impact is mitigated because the City's contribution for most retirees is a flat dollar amount and not subject to future increases unless the retiree is covered under PEMHCA and the PEMHCA minimum contribution exceeds the flat dollar amount in the future.

Another key assumption used in the valuation is the discount (interest) rate which is based on the expected rate of return of plan assets. The valuation is based on a discount rate of 7.0%. A 0.5% decrease in the discount rate would increase the annual required contribution by 6%. A 0.5% increase in the discount rate would decrease the annual required contribution by 5%.

GASB 45 requires that implicit rate subsidies be considered in the valuation of medical costs. An implicit rate subsidy occurs when the rates for retirees are the same as for active employees. Since pre-Medicare retirees are typically much older than active employees, their actual medical costs are almost always higher than for active employees. The valuation results were determined using the higher expected costs associated with retired employees.

Scheduled to take effect in 2018, the "Cadillac Tax" is a 40% non-deductible excise tax on employer-sponsored health coverage that provides high-cost benefits. For pre-65 retirees and individuals in high-risk professions, the threshold amounts are currently $11,850 for individual coverage and $30,950 for family coverage. 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 does not include any additional liability for the Cadillac Tax.

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 program determined in accordance with GASB 43 & 45. The actuarial liability (AL) is the present value of all the City's contributions projected to be paid under the program. The actuarial accrued liability (AAL) reflects the amount attributable to the past service of current employees and retirees. The normal cost reflects the accrual attributable for the current period.

| | Miscellaneous | Safety | Total |
|---|---|---|---|
| 1. Actuarial Liability (AL) | | | |
| Actives | $ 8,190,749 | $ 5,423,030 | $13,613,779 |
| Retirees | 16,596,960 | 17,203,604 | 33,800,564 |
| Total AL | $24,787,709 | $22,626,634 | $47,414,343 |
| *Explicit Contribution* | *$20,110,933* | *$18,186,386* | *$38,297,319* |
| *Implicit Subsidy* | *$ 4,676,775* | *$ 4,440,249* | *$ 9,117,024* |
| 2. Actuarial Accrued Liability (AAL) | | | |
| Actives | $ 5,771,075 | $ 3,066,916 | $ 8,837,991 |
| Retirees | 16,596,960 | 17,203,604 | 33,800,564 |
| Total AAL | $22,368,035 | $20,270,520 | $42,638,555 |
| *Explicit Contribution* | *$18,685,542* | *$16,836,806* | *$35,522,348* |
| *Implicit Subsidy* | *$ 3,682,493* | *$ 3,433,714* | *$ 7,116,207* |
| 3. Normal Cost | $ 303,514 | $ 307,401 | $ 610,915 |
| *Explicit Contribution* | *$ 196,707* | *$ 207,022* | *$ 403,729* |
| *Implicit Subsidy* | *$ 106,807* | *$ 100,379* | *$ 207,186* |
| No. of Active Employees | 508 | 270 | 778 |
| Average Age | 44.6 | 39.0 | 42.7 |
| Average Past Service | 12.3 | 11.7 | 12.1 |
| No. of Retired Employees* | 302 | 262 | 564 |
| Average Age | 68.4 | 64.9 | 66.8 |
| Average Retirement Age | 57.5 | 51.3 | 54.7 |

* 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 four fiscal years is presented below:

| | 6/30/2012 | 6/30/2013 | 6/30/2014 | 6/30/2015 |
|---|---|---|---|---|
| 1. Beginning Market Value of Assets | $8,240,851 | $ 8,146,021 | $10,632,403 | $14,909,052 |
| 2. Contribution | 2,314,000 | 3,051,000 | 4,881,000 | 2,763,005 |
| 3. Fund Earnings (gross) | 144,158 | 1,026,517 | 2,118,149 | ( 43,051) |
| 4. Benefit Payments | ( 2,542,050) | ( 1,577,434) | ( 2,704,796) | ( 2,794,465) |
| 5. Administrative Expenses | ( 10,938) | ( 13,701) | ( 17,704) | ( 15,705) |
| 6. Ending Market Value of Assets | $8,146,021 | $10,632,403 | $14,909,052 | $14,818,836 |
| 7. Estimated Gross Rate of Return | 2% | 12% | 18% | 0% |

## C. Development of Actuarial Value of Assets

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.

| | 6/30/2012 | 6/30/2013 | 6/30/2014 | 6/30/2015 | |
|---|---|---|---|---|---|
| 1 Market value of assets | | | | | $14,818,836 |
| 2 Actual gross rate of return | 1.78% | 11.57% | 18.09% | ( 0.29%) | |
| 3 Expected rate of return | 7.25% | 7.25% | 7.25% | 7.25% | |
| 4 Actual fund earnings | $144,158 | $1,026,518 | $2,118,149 | ( 43,051) | $ 3,245,774 |
| 5 Expected fund earnings | 588,798 | 643,507 | 849,095 | 1,079,197 | 3,160,597 |
| 6 Gain(loss) [(4) - (5)] | (444,640) | 383,011 | 1,269,054 | (1,122,248) | |
| 7 Percent of gain/(loss) recognized 6/30/2015 | 80% | 60% | 40% | 20% | |
| 8 Recognized gain/(loss) [(6) x (7)] | (355,712) | 229,807 | 507,622 | (224,450) | 157,267 |
| 9. Blended value of assets at 6/30/2015 [(1) - (4) + (5) + (8)] | | | | | $14,890,926 |
| 10. Percent increase/(decrease) of (9) over (1) | | | | | 0.5% |
| 11. Actuarial value of assets, not more than 120% nor less than 80% of market value | | | | | $14,890,926 |

## D. Development of Unfunded Actuarial Accrued Liability (UAAL) @ June 30, 2015

The table below presents the development of the unfunded actuarial accrued liability (UAAL). The UAAL is the excess of the actuarial accrued liability (AAL) over the actuarial value of eligible plan assets.

| | Explicit | Implicit | Total |
|---|---|---|---|
| 1. Actuarial Accrued Liability (AAL) | $35,522,348 | $ 7,116,207 | $42,638,555 |
| 2. Actuarial Valuation of Assets | ( 14,890,926) | ( 0) | ( 14,890,926) |
| 3. Unfunded AAL | $20,631,422 | $ 7,116,207 | $27,747,629 |

## E. Required Supplementary Information (Funding Progress @6/30/2015)

The table below presents a sample disclosure of the funding progress as of the beginning of the fiscal year.

| | | | |
|---|---|---|---|
| 1. Actuarial Accrued Liability (AAL) | $35,522,348 | $ 7,116,207 | $42,638,555 |
| 2. Actuarial Valuation of Assets | ( 14,890,926) | ( 0) | ( 14,890,926) |
| 3. Unfunded AAL | $20,631,422 | $ 7,116,207 | $27,747,629 |
| 4. Funded Ratio | 42% | 0% | 35% |
| 5. Current Payroll | $70,277,000 | $70,277,000 | $70,277,000 |
| 6. UAAL as % of Payroll | 29% | 10% | 39% |

## F. Projected Actuarial Value of Assets @June 30, 2016

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, 2015 | $14,890,926 |
| 2. Expected Fund Earnings @7.0% | 1,068,152 |
| 3. Expected City Contributions* | 4,214,876 |
| 4. Expected Benefit Payments & Expenses* | ( 3,478,104) |
| 5. Projected Actuarial Value of Assets at June 30, 2016 | $16,695,850 |

* Based on projected City contributions equal to $4,214,876 and reimbursements for direct payments for benefits and implicit rate subsidies equal to $3,478,104.

G. Development of Unfunded Actuarial Accrued Liability@6/30/2016

The table below presents the development of the unfunded actuarial accrued liability. The unfunded actuarial accrued liability is the excess of the actuarial accrued liability (AAL) over the actuarial value of eligible plan assets[1].

| | Explicit | Implicit | Total |
|---|---|---|---|
| 1. Actuarial Accrued Liability (AAL) | $35,547,601 | $7,189,644 | $42,737,245 |
| 2. Actuarial Value of Assets[1] | ( 16,695,850) | ( 0) | ( 16,695,850) |
| 3. Unfunded AAL | $18,851,751 | $7,189,644 | $26,041,395 |

H. Amortization of Unfunded Actuarial Accrued Liability

The amortization of the UAAL component of the annual required contribution (ARC) is being amortized on a level-percentage of pay basis over a period of 11 years. Under the level-percentage of pay method, the amortization payment is scheduled to increase in future years based on wage inflation.

| | | | |
|---|---|---|---|
| 1. Unfunded AAL (UAAL) | $18,851,751 | $ 7,189,644 | $26,041,395 |
| 2. Amortization Factor | 8.559010 | 8.559010 | 8.559010 |
| 3. Amortization of UAAL | $ 2,202,562 | $ 840,009 | $ 3,042,571 |

I. Annual Required Contribution (ARC)

The table below presents the development of the annual required contribution (ARC) under GASB 45 for the fiscal year ending June 30, 2017 and estimated for the fiscal year ending June 30, 2018.

| | | | |
|---|---|---|---|
| *FY2016/2017* | | | |
| 1. Normal Cost at End of Fiscal Year | $ 444,950 | $ 228,340 | $ 673,290 |
| 2. Amortization of Surplus | 2,202,562 | 840,009 | 3,042,571 |
| 3. Annual Required Contribution (ARC) | $ 2,647,512 | $ 1,068,349 | $ 3,715,861 |
| 4. Expected Hybrid Employee Contributions | ( 133,200) | ( 0) | ( 133,200) |
| 5. City ARC | $ 2,514,312 | $ 1,068,349 | $ 3,582,661 |
| 6. Expected Payroll | $72,385,000 | $72,385,000 | $72,385,000 |
| 7. City ARC as % Payroll | 3.5% | 1.5% | 5.0% |
| *FY2017/2018* | | | |
| 1. Normal Cost at End of Fiscal Year | $ 458,299 | $ 235,190 | $ 693,489 |
| 2. Amortization of Surplus | 2,268,639 | 865,209 | 3,133,848 |
| 3. Annual Required Contribution (ARC) | $ 2,726,938 | $ 1,100,399 | $ 3,827,337 |
| 4. Expected Hybrid Employee Contributions | ( 133,200) | ( 0) | ( 133,200) |
| 5. City ARC | $ 2,593,738 | $ 1,100,399 | $ 3,694,137 |
| 6. Expected Payroll | $74,556,000 | $74,556,000 | $74,556,000 |
| 7. City ARC as % Payroll | 3.5% | 1.5% | 5.0% |

[1] Based on projected actuarial accrued liability and projected actuarial value of plan assets at June 30, 2016.

J. Estimated Net OPEB Obligation at June 30, 2017 and June 30, 2018

The table below shows an estimate of the net OPEB obligation/(asset) at the end of the upcoming fiscal years assuming the City contributes at the annual required contribution by the end of the fiscal year and that the City's net OPEB obligation/(asset) at June 30, 2015 is ($1,500,000).

| | 2015/2016 | 2016/2017 | 2017/2018 |
|---|---|---|---|
| 1. Annual Required Contribution (ARC) | $2,713,000 | $3,583,000 | $3,694,000 |
| 2. Interest on Net OPEB Obligation | ( 105,000) | ( 206,000) | ( 197,000) |
| 3. Adjustment to ARC | 161,000 | 344,000 | 354,000 |
| 4. Annual OPEB Cost | $2,769,000 | $3,721,000 | $3,851,000 |
| 5. Estimated City Contributions Made | ( 4,215,000) | ( 3,583,000) | ( 3,694,000) |
| 6. Increase in Net OPEB Obligation | ($1,446,000) | $ 138,000 | $ 157,000 |
| 7. Net OPEB Obligation/(Asset) – Beginning of Fiscal Year | ( 1,500,000) | ( 2,946,000) | ( 2,808,000) |
| 8. Net OPEB Obligation/(Asset) – End of Fiscal Year | ($2,946,000) | ($2,808,000) | ($2,651,000) |

K. Sensitivity Analysis:

The impact of a 0.5% decrease or increase in the discount (interest) rate and the impact of a 1% increase in future healthcare trend rates on the City's actuarial liability, actuarial accrued liability, unfunded actuarial accrued liability and the annual required contribution is provided below:

| | Dollar ($) Increase/ (Decrease) | Percentage (%) Increase/ (Decrease) |
|---|---|---|
| *0.5% Decrease in Discount Rate* | | |
| - Actuarial Liability | $2,655,170 | 8% |
| - Actuarial Accrued Liability | $1,967,449 | 5% |
| - Unfunded Actuarial Accrued Liability | $1,967,449 | 7% |
| - Annual Required Contribution | $ 209,226 | 6% |
| *0.5% Increase in Discount Rate* | | |
| - Actuarial Liability | ($2,407,087) | ( 7%) |
| - Actuarial Accrued Liability | ($1,818,068) | ( 4%) |
| - Unfunded Actuarial Accrued Liability | ($1,818,068) | ( 7%) |
| - Annual Required Contribution | ($ 195,432) | ( 5%) |
| *1% Increase in Future Healthcare Trend Rates* | | |
| - Actuarial Liability | $2,578,633 | 8% |
| - Actuarial Accrued Liability | $1,607,806 | 4% |
| - Unfunded Actuarial Accrued Liability | $1,607,806 | 6% |
| - Annual Required Contribution | $ 297,786 | 8% |

L. <u>Alternative Results: Alternative Discount Rate</u>

The table below shows the impact on the liability and annual required contributions using a lower discount rate of 6.5%.

| *As of June 30, 2015* | Explicit Contribution | Implicit Rate Subsidy | Total |
|---|---|---|---|
| 1. Actuarial Liability (AL) | | | |
| Actives | $ 9,432,850 | $ 5,395,219 | $14,828,069 |
| Retirees | 31,026,491 | 4,214,953 | 35,241,444 |
| Total AL | $40,459,341 | $ 9,610,172 | $50,069,513 |
| 2. Actuarial Accrued Liability (AAL) | | | |
| Actives | $ 6,233,096 | $ 3,131,464 | $ 9,364,560 |
| Retirees | 31,026,491 | 4,214,953 | 35,241,444 |
| Total AAL | $37,259,587 | $ 7,346,417 | $44,606,004 |
| 3. Actuarial Value of Assets | ( 14,890,826) | ( 0) | ( 14,890,926) |
| 4. Unfunded AAL (UAAL) | $22,368,661 | $ 7,346,417 | $29,715,078 |
| | | | |
| *Projected to June 30, 2016* | | | |
| 1. Actuarial Accrued Liability (AAL) | $37,273,106 | $ 7,419,053 | $44,692,159 |
| 2. Actuarial Value of Assets | ( 16,695,850) | ( 0) | ( 16,695,850) |
| 3. Unfunded AAL (UAAL) | $20,577,256 | $ 7,419,053 | $27,996,309 |
| 4. Amortization Factor | 8.788265 | 8.788265 | 8.788265 |
| 5. Amortization of UAAL | $ 2,341,447 | $ 844,200 | $ 3,185,647 |
| | | | |
| *2016/2017 Annual Required Contribution* | | | |
| 1. Normal Cost at End of Year | $ 492,297 | $ 247,143 | $ 739,440 |
| 2. Amortization of UAAL at End of Year | 2,341,447 | 844,200 | 3,185,647 |
| 3. Annual Required Contribution (ARC) | $ 2,833,744 | $ 1,091,343 | $ 3,925,087 |
| 4. Expected Hybrid Employee Contributions | ( 133,200) | ( 0) | ( 133,200) |
| 5. City ARC | $ 2,700,544 | $ 1,091,343 | $ 3,791,887 |
| 6. Expected Payroll | $72,385,000 | $72,385,000 | $72,385,000 |
| 7. City ARC as % of Payroll | 3.7% | 1.5% | 5.2% |
| | | | |
| *2017/2018 Annual Required Contribution* | | | |
| 1. Normal Cost at End of Year | $ 507,066 | $ 254,557 | $ 761,623 |
| 2. Amortization of UAAL at End of Year | 2,411,690 | 869,526 | 3,281,216 |
| 3. Annual Required Contribution (ARC) | $ 2,918,756 | $ 1,124,083 | $ 4,042,840 |
| 4. Expected Hybrid Employee Contributions | ( 133,200) | ( 0) | ( 133,200) |
| 5. City ARC | $ 2,785,556 | $ 1,124,083 | $ 3,909,640 |
| 6. Expected Payroll | $74,556,000 | $74,556,000 | $74,556,000 |
| 7. City ARC as % of Payroll | 3.7% | 1.5% | 5.2% |

## *SECTION III. PROJECTED CASH FLOWS*

The valuation process includes the projection of the expected benefits and/or contributions 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 or at first eligibility, if later. 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 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 Cash Flows – Representative Years

| Fiscal Year | Future Retirees | Retired Employees | City Total | Subsidy | Total |
|---|---|---|---|---|---|
| 2015/16 | $ 90,119 | $ 2,705,341 | $ 2,795,460 | $ 624,528 | $ 3,419,988 |
| 2016/17 | $ 167,472 | $ 2,675,001 | $ 2,842,473 | $ 669,685 | $ 3,512,158 |
| 2017/18 | $ 243,000 | $ 2,643,789 | $ 2,886,789 | $ 683,338 | $ 3,570,127 |
| 2018/19 | $ 311,387 | $ 2,611,414 | $ 2,922,801 | $ 691,049 | $ 3,613,850 |
| 2019/20 | $ 372,572 | $ 2,578,390 | $ 2,950,962 | $ 696,254 | $ 3,647,216 |
| 2020/21 | $ 426,304 | $ 2,543,256 | $ 2,969,560 | $ 726,736 | $ 3,696,296 |
| 2021/22 | $ 474,885 | $ 2,505,413 | $ 2,980,298 | $ 756,249 | $ 3,736,547 |
| 2022/23 | $ 518,309 | $ 2,466,031 | $ 2,984,340 | $ 727,814 | $ 3,712,154 |
| 2023/24 | $ 555,273 | $ 2,424,559 | $ 2,979,832 | $ 732,625 | $ 3,712,457 |
| 2024/25 | $ 586,862 | $ 2,381,169 | $ 2,968,031 | $ 729,293 | $ 3,697,324 |
| 2025/26 | $ 616,111 | $ 2,333,228 | $ 2,949,339 | $ 718,554 | $ 3,667,893 |
| 2026/27 | $ 644,524 | $ 2,284,265 | $ 2,928,789 | $ 712,830 | $ 3,641,619 |
| 2027/28 | $ 669,816 | $ 2,231,286 | $ 2,901,102 | $ 708,869 | $ 3,609,971 |
| 2028/29 | $ 694,763 | $ 2,174,048 | $ 2,868,811 | $ 706,446 | $ 3,575,257 |
| 2029/30 | $ 718,737 | $ 2,115,121 | $ 2,833,858 | $ 683,168 | $ 3,517,026 |
| 2030/31 | $ 743,064 | $ 2,053,080 | $ 2,796,144 | $ 661,972 | $ 3,458,116 |
| 2031/32 | $ 767,326 | $ 1,986,098 | $ 2,753,424 | $ 630,784 | $ 3,384,208 |
| 2032/33 | $ 792,292 | $ 1,917,641 | $ 2,709,933 | $ 588,929 | $ 3,298,862 |
| 2033/34 | $ 816,637 | $ 1,845,291 | $ 2,661,928 | $ 560,176 | $ 3,222,104 |
| 2034/35 | $ 841,534 | $ 1,769,686 | $ 2,611,220 | $ 573,921 | $ 3,185,141 |
| 2035/36 | $ 866,514 | $ 1,692,080 | $ 2,558,594 | $ 575,864 | $ 3,134,458 |
| 2036/37 | $ 890,652 | $ 1,612,167 | $ 2,502,819 | $ 567,254 | $ 3,070,073 |
| 2037/38 | $ 914,384 | $ 1,529,567 | $ 2,443,951 | $ 601,623 | $ 3,045,574 |
| 2038/39 | $ 937,165 | $ 1,445,163 | $ 2,382,328 | $ 639,412 | $ 3,021,740 |
| 2039/40 | $ 958,301 | $ 1,359,287 | $ 2,317,588 | $ 680,412 | $ 2,998,000 |
| 2040/41 | $ 977,274 | $ 1,273,083 | $ 2,250,357 | $ 666,016 | $ 2,916,373 |
| 2041/42 | $ 994,008 | $ 1,185,643 | $ 2,179,651 | $ 692,230 | $ 2,871,881 |
| 2042/43 | $ 1,008,849 | $ 1,098,178 | $ 2,107,027 | $ 737,022 | $ 2,844,049 |
| 2043/44 | $ 1,021,543 | $ 1,011,274 | $ 2,032,817 | $ 717,089 | $ 2,749,906 |
| 2044/45 | $ 1,031,772 | $ 925,584 | $ 1,957,356 | $ 652,925 | $ 2,610,281 |
| 2045/46 | $ 1,039,908 | $ 844,086 | $ 1,883,994 | $ 637,254 | $ 2,521,248 |
| 2050/51 | $ 1,100,568 | $ 533,454 | $ 1,634,022 | $ 305,198 | $ 1,939,220 |
| 2055/56 | $ 1,067,559 | $ 278,750 | $ 1,346,309 | $ 78,396 | $ 1,424,705 |
| 2060/61 | $ 943,318 | $ 117,540 | $ 1,060,858 | $ 1,058 | $ 1,061,916 |
| 2065/66 | $ 766,484 | $ 42,923 | $ 809,407 | $ 0 | $ 809,407 |
| 2070/71 | $ 578,185 | $ 17,182 | $ 595,367 | $ 0 | $ 595,367 |
| 2075/76 | $ 386,825 | $ 9,263 | $ 396,088 | $ 0 | $ 396,088 |
| 2080/81 | $ 208,088 | $ 5,401 | $ 213,489 | $ 0 | $ 213,489 |
| 2085/86 | $ 81,416 | $ 2,142 | $ 83,558 | $ 0 | $ 83,558 |
| 2090/91 | $ 20,842 | $ 399 | $ 21,241 | $ 0 | $ 21,241 |
| 2095/86 | $ 2,927 | $ 0 | $ 2,927 | $ 0 | $ 2,927 |
| 2100/01 | $ 122 | $ 0 | $ 122 | $ 0 | $ 122 |
| All Years | $49,593,990 | $66,810,824 | $116,404,814 | $23,870,287 | $140,275,101 |

## *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 |
|---|---|
| 2007 | $80.80 |
| 2008 | $97.00 |
| 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+ | 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 | ○ 1% of base pay mandatory contribution<br>○ effective immediately upon employment | ○ 1% of base pay mandatory contribution<br>○ effective January 1, 2006 | ○ 1% of base pay mandatory contribution<br>○ effective January 1, 2006 | None |
| Part B – Pre-Retirement City Contributions: | ○ City contributes $2.50 per month for each year of age plus service during employment<br>○ effective upon 5 years of vesting service; immediate vesting for industrial disability<br>○ retroactively deposited; biweekly thereafter | ○ City contributes $2.50 per month for each year of age plus service during employment<br>○ effective upon 5 years of vesting service; immediate vesting for industrial disability<br>○ retroactively deposited; biweekly thereafter | None | None |
| Part C – Leave Conversion: | ○ mandatory transfer of a portion of accumulated leave during any leave buyout<br>○ amount of leave conversion varies by bargaining unit & subject to negotiation<br>○ not payable in cash | ○ mandatory transfer of a portion of accumulated leave during any leave buyout<br>○ amount of leave conversion varies by bargaining unit & subject to negotiation<br>○ not payable in cash | ○ mandatory transfer of a portion of accumulated leave during any leave buyout<br>○ amount of leave conversion varies by bargaining unit & subject to negotiation<br>○ not payable in cash | |
| Part D – Conversion Contribution: | None | ○ For fully converted employees who retire from the plan only<br>○ 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 | ○ 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 | ○ City will provide the PEMHCA minimum contribution when a retiree's RHS account value has been exhausted | ○ City will provide the PEMHCA minimum contribution when a retiree's RHS account value has been exhausted | ○ City will contribute $400 per month ($450 for Police employees retiring prior to January 1, 2006) | ○ 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 | ○ 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 2015 and 2016 monthly medical premiums for the primary medical plans in which the retirees are enrolled.

| 2015 Other So. Cal. Region | Kaiser | BS HMO | BS NVP HMO | PERS Care | PERS Choice | PERS Select |
|---|---|---|---|---|---|---|
| Retiree Only | $ 579.80 | $ 598.66 | $ 561.09 | $ 657.32 | $ 594.40 | $ 585.58 |
| Retiree Plus Spouse | $1,159.60 | $1,197.32 | $1,122.18 | $1,314.64 | $1,188.80 | $1,171.16 |
| Retiree Plus Family | $1,507.48 | $1,556.52 | $1,458.83 | $1,709.03 | $1,545.44 | $1,522.51 |
| Retiree Only- Medicare | $ 295.51 | $ 352.63 | $ 352.63 | $ 368.76 | $ 339.47 | $ 339.47 |
| Retiree Plus Spouse – Medicare | $ 591.02 | $ 705.26 | $ 705.26 | $ 737.52 | $ 678.94 | $ 678.94 |

| 2015 Other So. Cal. Region (Continued) | Sharp HMO | UHC HMO | Anthem HMO Select | Anthem HMO Traditional | Health Net Salud | Health Net Smart Care |
|---|---|---|---|---|---|---|
| Retiree Only | $ 564.57 | $ 449.10 | $ 653.97 | $ 743.12 | $ 520.59 | $ 579.88 |
| Retiree Plus Spouse | $1,129.14 | $ 898.20 | $1,307.94 | $1,486.24 | $1,041.18 | $1,159.76 |
| Retiree Plus Family | $1,467.88 | $1,167.66 | $1,700.32 | $1,932.11 | $1,353.53 | $1,507.69 |
| Retiree Only- Medicare | $ 327.66 | $ 267.41 | $ 445.38 | $ 445.38 | $ 276.85 | $ 276.85 |
| Retiree Plus Spouse – Medicare | $ 655.32 | $ 534.82 | $ 890.76 | $ 890.76 | $ 553.70 | $ 553.70 |

| 2016 Other So. Cal. Region | Kaiser | BS HMO | BS NVP HMO | PERS Care | PERS Choice | PERS Select |
|---|---|---|---|---|---|---|
| Retiree Only | $ 605.05 | $ 654.87 | $ 666.35 | $ 761.50 | $ 683.71 | $ 625.20 |
| Retiree Plus Spouse | $1,210.10 | $1,309.74 | $1,332.70 | $1,523.00 | $1,367.42 | $1,250.40 |
| Retiree Plus Family | $1,573.13 | $1,702.66 | $1,732.51 | $1,979.90 | $1,777.65 | $1,625.52 |
| Retiree Only- Medicare | $ 297.23 | N/A | N/A | $ 408.04 | $ 366.38 | $ 366.38 |
| Retiree Plus Spouse – Medicare | $ 594.46 | N/A | N/A | $ 816.08 | $ 732.76 | $ 732.76 |

| 2016 Other So. Cal. Region (Continued) | Sharp HMO | UHC HMO | Anthem HMO Select | Anthem HMO Traditional | Health Net Salud | Health Net Smart Care |
|---|---|---|---|---|---|---|
| Retiree Only | $ 561.34 | $ 493.99 | $ 634.75 | $ 710.79 | $ 535.98 | $ 596.98 |
| Retiree Plus Spouse | $1,122.68 | $ 987.98 | $1,269.50 | $1,421.58 | $1,071.96 | $1,193.96 |
| Retiree Plus Family | $1,459.48 | $1,284.37 | $1,650.35 | $1,848.05 | $1,393.55 | $1,552.15 |
| Retiree Only- Medicare | N/A | $ 320.98 | N/A | N/A | N/A | N/A |
| Retiree Plus Spouse – Medicare | N/A | $ 641.96 | 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. The following tables display the age distribution for retirees and the age/service distribution for active employees as of the Measurement Date.

Age Distribution of Eligible Retired Participants & Beneficiaries

| | Miscellaneous | Safety | Total* | MRC Only | Waives | Grand Total |
|---|---|---|---|---|---|---|
| <50 | 1 | 2 | 3 | 5 | 11 | 19 |
| 50-54 | 10 | 26 | 36 | 2 | 6 | 44 |
| 55-59 | 41 | 37 | 78 | 3 | 6 | 87 |
| 60-64 | 52 | 70 | 122 | 5 | 7 | 134 |
| 65-69 | 68 | 60 | 128 | 4 | 11 | 143 |
| 70-74 | 41 | 28 | 69 | 3 | 13 | 85 |
| 75-79 | 34 | 21 | 55 | 2 | 14 | 71 |
| 80-84 | 18 | 8 | 26 | 1 | 14 | 41 |
| 85+ | 18 | 4 | 22 | 0 | 21 | 43 |
| Total: | 283 | 256 | 539 | 25 | 103 | 667 |
| Average Age: | 68.8 | 65.2 | 67.1 | 60.9 | 71.6 | 67.5 |
| Average Retirement Age: | 57.7 | 51.6 | 54.8 | 52.3 | 50.2 | 54.0 |

* 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 | 22 | 1 | | | | | | | | 23 | 0 | 10 | 13 |
| 25-29 | 48 | 20 | 0 | | | | | | | 68 | 0 | 49 | 19 |
| 30-34 | 38 | 57 | 26 | 3 | | | | | | 124 | 0 | 116 | 8 |
| 35-39 | 22 | 36 | 59 | 9 | | | | | | 126 | 0 | 119 | 7 |
| 40-44 | 14 | 21 | 41 | 23 | 7 | 3 | | | | 109 | 0 | 106 | 3 |
| 45-49 | 15 | 17 | 24 | 22 | 22 | 17 | 1 | | | 118 | 16 | 94 | 8 |
| 50-54 | 8 | 8 | 21 | 21 | 16 | 28 | 5 | 1 | | 108 | 42 | 56 | 10 |
| 55-59 | 8 | 6 | 8 | 9 | 6 | 12 | 6 | 0 | | 55 | 30 | 18 | 7 |
| 60-64 | 4 | 8 | 6 | 7 | 4 | 3 | 4 | 2 | | 38 | 18 | 11 | 9 |
| 65-69 | 1 | 2 | 0 | 0 | 1 | 2 | 0 | 0 | 1 | 7 | 4 | 0 | 3 |
| 70+ | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 1 | 0 | 1 |
| Total: | 180 | 176 | 186 | 94 | 56 | 66 | 16 | 3 | 1 | 778 | 111 | 579 | 88 |
| Average Age: | | | | | | | | | | 42.7 | 55.5 | 40.5 | 41.0 |
| Average Service: | | | | | | | | | | 12.1 | 24.6 | 10.4 | 7.6 |

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 | 17 | 1 | | | | | | | | 18 | 0 | 5 | 13 |
| 25-29 | 26 | 11 | | | | | | | | 37 | 0 | 18 | 19 |
| 30-34 | 16 | 32 | 14 | 1 | | | | | | 63 | 0 | 56 | 7 |
| 35-39 | 15 | 22 | 24 | 7 | | | | | | 68 | 0 | 61 | 7 |
| 40-44 | 13 | 7 | 25 | 14 | 4 | 1 | | | | 64 | 0 | 61 | 3 |
| 45-49 | 14 | 14 | 15 | 13 | 10 | 9 | 1 | | | 76 | 6 | 64 | 6 |
| 50-54 | 6 | 8 | 20 | 15 | 11 | 23 | 3 | 1 | 0 | 87 | 27 | 50 | 10 |
| 55-59 | 7 | 6 | 8 | 9 | 6 | 9 | 6 | 0 | 0 | 51 | 28 | 17 | 6 |
| 60-64 | 3 | 8 | 6 | 7 | 4 | 2 | 3 | 2 | 0 | 35 | 16 | 10 | 9 |
| 65-69 | 1 | 2 | 0 | 0 | 1 | 2 | 0 | 0 | 1 | 7 | 4 | 0 | 3 |
| 70+ | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 1 | 0 | 1 |
| Total: | 118 | 111 | 113 | 66 | 36 | 47 | 13 | 3 | 1 | 508 | 82 | 342 | 84 |
| | | | | | | | | | | | | | |
| Average Age | | | | | | | | | | 44.6 | 56.8 | 42.6 | 40.8 |
| Average Service | | | | | | | | | | 12.3 | 24.4 | 10.7 | 7.1 |

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 | 5 | | | | | | | | | 5 | 0 | 5 | 0 |
| 25-29 | 22 | 9 | | | | | | | | 31 | 0 | 31 | 0 |
| 30-34 | 22 | 25 | 12 | 2 | | | | | | 61 | 0 | 60 | 1 |
| 35-39 | 7 | 14 | 35 | 2 | | | | | | 58 | 0 | 58 | 0 |
| 40-44 | 1 | 14 | 16 | 9 | 3 | 2 | | | | 45 | 0 | 45 | 0 |
| 45-49 | 1 | 3 | 9 | 9 | 12 | 8 | | | | 42 | 10 | 30 | 2 |
| 50-54 | 2 | 0 | 1 | 6 | 5 | 5 | 2 | 0 | | 21 | 15 | 6 | 0 |
| 55-59 | 1 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 4 | 2 | 1 | 1 |
| 60-64 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 3 | 2 | 1 | 0 |
| 65-69 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 70+ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total: | 62 | 65 | 73 | 28 | 20 | 19 | 3 | 0 | 0 | 270 | 29 | 237 | 4 |
| | | | | | | | | | | | | | |
| Average Age | | | | | | | | | | 39.0 | 51.7 | 37.4 | 45.5 |
| Average Service | | | | | | | | | | 11.7 | 25.2 | 10.0 | 17.6 |

## *SECTION VI. ACTUARIAL ASSUMPTIONS AND METHODS*

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

Measurement Date: June 30, 2015

Fiscal Year: July 1st to June 30th

Fiscal Years Covered: Fiscal Year Ending June 30, 2017 & Fiscal Year Ending June 30, 2018 – 1 Year Lag Period

Discount Rate: 7.0% for cash subsidy and PEMHCA implied subsidy, pre-funded through CERBT strategy 1

*[The prior valuation assumed 0.25% higher rate for the cash subsidy and 4.25% for PEMHCA]*

Inflation: 2.8% per annum

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 | 1.7 | 0.3 |
| 30 | 0.0 | 4.8 | 0.7 |
| 35 | 0.0 | 7.9 | 1.6 |
| 40 | 0.0 | 11.0 | 3.0 |
| 45 | 0.0 | 14.1 | 5.3 |
| 50 | 0.0 | 18.5 | 27.7 |
| 55 | 0.0 | 47.9 | 40.9 |

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.

*[The prior valuation assumed 75% of future retirees continue coverage through PEMHCA.]*

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. Past valuations assumed the City was exempt from the valuation of any medical plan implicit rate subsidy. 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 |
|---|---|---|
| 2016 | Actual | Actual |
| 2017 | 7.0% | 6.5% |
| 2018 | 6.5% | 6.0% |
| 2019 | 6.0% | 5.5% |
| 2020 | 5.5% | 5.0% |
| 2021+ | 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 UAAL: | The unfunded actuarial accrued liability is being amortized using a level-percentage of payroll method on a closed basis. The remaining period is 11 years. |
| CalPERS Pension Plan | The rates used are from the CalPERS 1997-2011 Experience Study. |

## *SECTION VII. ACTUARIAL CERTIFICATION*

This report summarizes the GASB actuarial valuation for the City of Newport Beach (the "City") as of June 30, 2015. To the best of our knowledge, the report presents a fair position of the funded status of the plan in accordance with GASB Statements No. 43 (Financial Reporting for Post-Employment Benefit Plans Other Than Pension Plans) and No. 45 (Accounting and Financial Reporting by Employers for Post-Employment Benefits Other Than Pensions). The valuation is also 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: 11/11/2015

## *SECTION VIII. DEFINITIONS*

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

**Actuarial Liability (also referred to as 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.

**Actuarial Accrued Liability** – That portion, as determined by a particular Actuarial Cost Method, of the Actuarial Present Value of plan benefits and expenses which is not provided for by the future Normal Costs.

**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 Normal Cost and an Actuarial Accrued Liability.

**Actuarial Present Value –** 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.

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

**Annual Required Contribution (ARC)** – The employer's periodic required contributions to a defined benefit OPEB plan, calculated in accordance with the parameters.

**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.

**Net OPEB Obligation** – The cumulative difference since the effective date of this Statement between annual OPEB cost and the employer's contributions to the plan, including the OPEB liability (asset) at transition, if any, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to OPEB-related debt.

**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.

**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.

**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.

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