



TOWN OF UPTON

OTHER POSTEMPLOYMENT BENEFITS PROGRAM

ACTUARIAL VALUATION

July 1, 2015

Prepared by:

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October 20, 2016

Ms. Blythe Robinson
Town Manager
Town of Upton
1 Main Street, Box 1
Upton, MA 01568

Dear Blythe:

Enclosed is our report summarizing the results of an actuarial valuation of the Town of Upton's Other Postemployment Benefits (OPEB) as of July 1, 2015. Our valuation was performed in accordance with the provisions contained in the GASB Statement No. 45, Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions (GASB 45).

A summary of the valuation results is shown in Section 1. The principal results of our valuation are summarized in Section 2. The Plan Provisions and Actuarial Assumptions and Methods are shown in Sections 6 and 7, respectively. Section 8 summarizes the demographic profile of active employees and retirees.

The required disclosures under GASB 45 are presented in Section 3.

Our best estimate health care cost trend assumptions are based on recent experience and anticipated future cost increases under the Town of Upton medical plans. Section 5 illustrates the sensitivity of actuarial accrued liability and annual required contribution to a one percentage increase and decrease in the health care cost trend assumption for each future year.

Our actuarial valuation is based on a discount rate of 4% compounded annually. To illustrate the impact on cost of fully prefunding the Town's benefit liabilities, our report also includes valuation results based on an alternative 7.5% discount rate. Section 5 illustrates the sensitivity of actuarial accrued liability and annual required contribution to a one percentage increase and decrease in the discount rate.

We also provide 30-year forecasts of the OPEB liability under a pay-as-you-go funding arrangement and a fully-funded arrangement as well as a 10-year forecast of the Annual OPEB Cost and the Net OPEB Obligation in Section 4.

K M S A C T U A R I E S

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Ms. Blythe Robinson
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Our calculations were based on participant census data and other information provided by the Town of Upton and the benefit provisions of the medical plans as described in the benefit summaries. Our valuation is also based on medical plan rates provided by the Town in the excel file "GASB 45 Data 07 2016".

Our valuation follows generally accepted actuarial methods and we perform such tests as we consider necessary to assure the accuracy of the results. The amounts presented in this report have been appropriately determined according to the actuarial assumptions and methods stated herein.

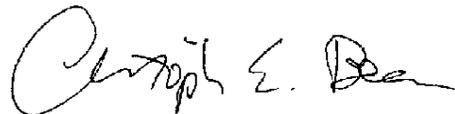
We are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

We appreciate this opportunity to be of service to the Town of Upton. We are available to answer any questions with respect to our valuation.

Respectfully submitted,



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ACTUARIAL CERTIFICATION

This report presents the results of the Actuarial Valuation for the Town of Upton Postemployment Benefits Other Than Pensions as of July 1, 2015. The report presents the accounting and financial reporting information in accordance with Statement Number 45 of the Governmental Accounting Standards Board (GASB 45).

This valuation was performed using employee and retiree data and financial information provided to us by the Town. Although we did not audit the data used in the valuation, we believe that the information is complete and reliable.

This report was completed in accordance with generally accepted actuarial standards and procedures, and conforms to the Code of Professional Conduct of the American Academy of Actuaries. The actuarial assumptions other than those explicitly applicable to the postemployment benefit plans are consistent with those used by the Worcester Regional Retirement System's actuaries for the Retirement System pension valuations.

Future actuarial valuation results may differ significantly from the current results presented in this report. Examples of potential sources of volatility include plan experience differing from that anticipated by the economic or demographic assumptions, the effect of new entrants, changes in economic or demographic assumptions, the effect of law changes and the delayed effect of smoothing techniques.

This report is intended for the sole use of the Town of Upton and is intended to provide information to comply with the stated purpose of the report. It may not be appropriate for other purposes.

The undersigned credentialed actuaries are Members of the American Academy of Actuaries and together meet the Qualification Standards of the American Academy of Actuaries necessary to render the actuarial opinion contained herein. They are available to answer any questions with regard to this report.

Respectfully submitted,



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SECTION 1 - SUMMARY

BACKGROUND

The Town of Upton provides postemployment medical benefits to Town retirees and their covered dependents. The Town provides benefits as follows:

- ◆ Group 1 employees hired before April 2, 2012: retire after attaining age 55 with 10 or more years of service or any age with 20 or more years of service
- ◆ Group 1 employees hired after April 1, 2012: retire after attaining age 60 with 10 or more years of service
- ◆ Group 4 employees hired before April 2, 2012: retire after attaining age 55 or any age with 20 or more years of service
- ◆ Group 4 employees hired after April 1, 2012: retire after attaining age 55

Medical coverage continues to the spouse after the death of the retiree provided the spouse makes the required contributions.

GASB 45

The Governmental Accounting Standards Board (GASB) is responsible for establishing accounting standards for governmental entities. Calculations developed in accordance with GASB standards are required when providing financial statements.

GASB believes that postemployment benefits are a form of deferred compensation whose cost should be recognized while the employee actually renders services rather than when the actual benefits are paid, many years later. Ideally under the GASB standard the entire postemployment liability is recognized by the time an active participant begins to receive postemployment benefits. GASB 45's focus is on postemployment benefits other than pensions, such as medical, dental and life insurance benefits. Unlike pensions where sponsors are pre-funding for benefits due in the future, the impact of GASB 45 will be to significantly increase cash pay-as-you-go expense.

The effective date for GASB 45 is a function of the Town's total annual revenues in the first fiscal year ending after June 15, 1999. We understand that this is your fiscal year that ended June 30, 1999, and that your related revenues were less than \$10 million. As a result, the Town was required to comply with GASB 45 for the fiscal year ending June 30, 2010.

ACTUARIAL VALUATION

As of July 1, 2015, there are 56 active employees who may be eligible for benefits in the future and 19 retired employees, covered spouses and survivors who are currently receiving benefits. Coverage is for individuals and families or individuals and spouses depending on the coverage selected.

SECTION 1 - SUMMARY

Prior to GASB 45, the annual cost recognized was the annual premiums or benefits paid plus administrative expenses less any participant contributions paid towards the coverage. Under GASB 45, an annual cost for postemployment coverage is developed for any person who is currently receiving benefits or who is currently actively employed and may be eligible to receive benefits in the future. In developing the GASB 45 cost for the Town of Upton, the payment of future benefits is determined using the current schedule of premiums under the plans provided by the Town modified to reflect the population and the fact that actual healthcare expenses are higher as individuals age. These age-adjusted costs are increased in the future under the annual healthcare cost trend rate assumptions. The age-adjusted per capita costs utilized in this valuation are detailed in Section 7, Actuarial Assumptions and Methods.

It is important to understand that even though the Town charges participants for coverage based on the individual or family premium schedule presented in our report, in developing a liability for the Town, GASB requires that these premiums be adjusted as noted above. The plan premium represents less than 100% of the actual cost that is required to be recognized under the GASB standard.

SUMMARY OF PRINCIPAL RESULTS

A summary of the principal results for the current and prior valuations follows:

| Valuation Date | <u>July 1, 2015</u> | <u>July 1, 2012</u> * |
|---|---------------------|-----------------------|
| Summary of Member Data | | |
| Active Members | 56 | 58 |
| Average Age | 47.6 | 48.0 |
| Average Service | 12.4 | 12.0 |
| Retired Employees and Survivors | 13 | 11 |
| Average Age | 69.9 | Not Available |
| Covered Spouses | 6 | Not Available |
| Discount rate | 4.00% | 4.00% |
| Actuarial Accrued Liability | \$6,904,487 | \$4,180,000 |
| Normal Cost | \$332,757 | \$260,000 |
| Assets | \$95,096 | \$0 |
| Unfunded Actuarial Accrued Liability | \$6,809,391 | \$4,180,000 |
| Annual Required Contribution | \$739,936 | \$520,000 |
| Expected Benefit Payments | \$80,020 | \$60,000 |

* Results from the July 1, 2012 valuation are from an actuarial report prepared by Danziger & Markhoff, LLP.

SECTION 1 - SUMMARY

ACTUARIAL ASSUMPTIONS

The most important assumption for GASB 45 is the discount rate, which is used to discount future benefits to current age. GASB 45 requires that the discount rate accurately reflects the rate of return on assets dedicated to paying the retiree medical benefits. This means that a traditional pay-as-you-go system, which pays benefits from the Town's annual budget and not a dedicated trust, must use a discount rate close to the rate of return on cash. Full pre-funding by use of a dedicated trust with a mixture of stocks and bonds can employ a higher discount rate that accurately reflects the expected return on trust assets dedicated to pay retiree medical benefits. For the Town of Upton, we selected a 4% discount rate to reflect the partial pre-funding of future payments.

CHANGES

Some assumptions used in this valuation have changed from those used in the July 1, 2012 valuation and are detailed in Section 7. The major assumption changes are summarized below:

- ◆ the pre-retirement decrements for General and Public Safety employees were updated to reflect those recently used by the Worcester Regional Retirement System actuaries.
- ◆ the pre- and post-retirement mortality rates were updated to utilize a more recent mortality table adjusted for mortality improvement.
- ◆ the excise tax under the Patient Protection and Affordable Care Act (PPACA) was incorporated to reflect the tax on benefits in excess of the mandated thresholds starting in 2020.

RESULTS

We have provided results based on a discount rate of 4%. As shown in Table 4.3 of Section 4, the Annual OPEB Cost for the fiscal year ending June 30, 2016 under GASB 45 is \$693,382 and the estimated Annual OPEB Cost for the fiscal year ending June 30, 2017 under GASB 45 is \$729,243.

The accumulated Net OPEB Obligation as of June 30, 2016 is \$3,128,309 and the estimated Net OPEB Obligation as of June 30, 2017 is \$3,675,609.

The Unfunded Actuarial Accrued Liability (UAAL) as of July 1, 2015 is \$6,809,391. The UAAL is shown below:

| | |
|---|-----------------|
| Actuarial Accrued Liability (AAL) | |
| Actives | \$5,726,541 |
| Retirees, Beneficiaries and Surviving Spouses | 1,177,946 |
| Total Actuarial Accrued Liability | \$6,904,487 |
| Actuarial Value of Assets | \$95,096 |
| Unfunded Actuarial Accrued Liability (UAAL) | \$6,809,391 |

SECTION 1 - SUMMARY

ACTUARIAL GAIN/LOSS ANALYSIS

In performing the actuarial valuation, various assumptions are made regarding future premium rates, mortality, retirement, disability and turnover rates as well as investment returns. A comparison of the results of the current valuation and the prior valuation is made to determine how closely actual experience relates to expected. Below is the development of the estimated Actuarial Gain or Loss for the current period:

| | |
|--|-------------|
| Unfunded Actuarial Accrued Liability, July 1, 2012 | \$4,180,000 |
| Expected Unfunded Actuarial Accrued Liability, July 1, 2015* | 4,910,000 |
| | |
| Actual Unfunded Actuarial Accrued Liability, July 1, 2015 | 6,809,391 |
| (Gain)/Loss during the current period | \$1,899,391 |

* from July 1, 2012 valuation report and roll forward results provided by prior actuary.

The actuarial loss of \$1,899,391 was comprised of demographic experience and updates to the premium and morbidity rates, pre-retirement decrement rates and post-retirement mortality rates.

REIMBURSEMENT FOR HEALTHCARE PREMIUM CONTRIBUTIONS

Whenever the service of a retired employee is attributable to service in more than one governmental unit and the retired employee receives a healthcare premium contribution, Section 9A1/2 of M.G.L. Section 32B provides for reimbursement by other governmental units for the portion of healthcare premium contributions that corresponds to the percentage of the retiree's creditable service that is attributable for each governmental unit. The other governmental units shall be charged based on the Town of Upton's contribution rate or the contribution rate of the first employer, whichever is lower.

For purposes of this valuation, we have not taken into account any prior service rendered at other Massachusetts entities for current or future retirees for the Town of Upton nor have we taken into account any service rendered by former Town of Upton employees currently working at or retired from other Massachusetts entities that may notify the Town of Upton of reimbursement due for former Town of Upton employees.

SECTION 2 - PRINCIPAL VALUATION RESULTS

The Town of Upton has established an OPEB trust for the purpose of prefunding OPEB liabilities through the adoption of Section 20 of Chapter 32B. Plan assets segregated and restricted in an OPEB trust must be dedicated to providing plan benefits to retirees and beneficiaries in accordance with the terms of the plan and must be legally protected from creditors of the employer. Further, employer contributions to the trust must be irrevocable.

The Actuarial Value of Plan Assets is equal to the market value. The asset activity during the 2-year period July 1, 2013 through June 30, 2015 follows:

TABLE 2.1 - OPEB TRUST ASSETS

| Market Value of Assets | | |
|-------------------------------|-------------------------|-------------------------|
| Fiscal Year Ending | <u>6/30/2015</u> | <u>6/30/2014</u> |
| Assets as of July 1 | \$0 | \$0 |
| Paid Premiums | 57,100 | 0 |
| OPEB Trust Contributions | 95,053 | 0 |
| Benefits Paid | (57,100) | 0 |
| Expenses | 0 | 0 |
| Investment Earnings | 43 | 0 |
| Assets as of June 30 | \$95,096 | \$0 |
| Estimated rate of return | 0.05% | 0.00% |

Information relating to the asset activity and paid premiums was provided by the Town.

SECTION 2 - PRINCIPAL VALUATION RESULTS

The Actuarial Accrued Liability is the portion of the Actuarial Present Value of Future Benefits which is allocated to all periods prior to a valuation year and therefore is not provided for by future Normal Costs. Below is the Actuarial Accrued Liability assuming a discount rate of 4%, a blended rate for partial prefunding, and 7.5%, the rate of return on a dedicated trust if the Town were to fully pre-fund benefits:

TABLE 2.2 - ACTUARIAL ACCRUED LIABILITY

| | <u>Partial Pre-Funding</u> | <u>Full Pre-Funding</u> |
|--|----------------------------|-------------------------|
| Discount Rate | 4% | 7.5% |
| Current Active Employees | | |
| Pre-Medicare Gross Benefit | \$3,538,249 | \$2,237,863 |
| Pre-Medicare Participant Contributions | 1,108,695 | 713,206 |
| Net Pre-Medicare Benefit | \$2,429,554 | \$1,524,657 |
| | | |
| Post - Medicare Gross Benefit | \$5,215,996 | \$2,008,800 |
| Post - Medicare Participant Contributions | 1,919,009 | 794,250 |
| Net Post - Medicare Benefit | \$3,296,987 | \$1,214,550 |
| | | |
| Total Current Active Employees | \$5,726,541 | \$2,739,207 |
| Current Retirees | | |
| Pre-Medicare Gross Benefit | \$33,496 | \$32,946 |
| Pre-Medicare Participant Contributions | 10,170 | 10,003 |
| Net Pre-Medicare Benefit | \$23,326 | \$22,943 |
| | | |
| Post - Medicare Gross Benefit | \$1,815,814 | \$1,234,332 |
| Post - Medicare Participant Contributions | 661,194 | 467,372 |
| Net Post - Medicare Benefit | \$1,154,620 | \$766,960 |
| | | |
| Total Current Retirees | \$1,177,946 | \$789,903 |
| Total Actuarial Accrued Liability (AAL) | \$6,904,487 | \$3,529,110 |

SECTION 2 - PRINCIPAL VALUATION RESULTS

The Normal Cost is the portion of the Actuarial Present Value of Future Benefits which is attributed to services rendered by active employees in the current year. Below is the Normal Cost assuming a discount rate of 4%, a blended rate for partial prefunding, and 7.5%, the rate of return on a dedicated trust if the Town were to fully pre-fund benefits:

TABLE 2.3 - NORMAL COST

| | <u>Partial Pre-Funding</u> | <u>Full Pre-Funding</u> |
|---|----------------------------|-------------------------|
| Discount Rate | 4% | 7.5% |
| Current Active Employees | | |
| Pre-Medicare Gross Benefit | \$187,261 | \$109,856 |
| Pre-Medicare Participant Contributions | 55,446 | 33,078 |
| Net Pre-Medicare Benefit | \$131,815 | \$76,778 |
| | | |
| Post - Medicare Gross Benefit | \$315,693 | \$106,041 |
| Post - Medicare Participant Contributions | 114,751 | 41,698 |
| Net Post - Medicare Benefit | \$200,942 | \$64,343 |
| | | |
| Total Current Active Employees | \$332,757 | \$141,121 |
| Current Retirees | | |
| Pre-Medicare Gross Benefit | \$0 | \$0 |
| Pre-Medicare Participant Contributions | 0 | 0 |
| Net Pre-Medicare Benefit | \$0 | \$0 |
| | | |
| Post - Medicare Gross Benefit | \$0 | \$0 |
| Post - Medicare Participant Contributions | 0 | 0 |
| Net Post - Medicare Benefit | \$0 | \$0 |
| | | |
| Total Current Retirees | \$0 | \$0 |
| | | |
| Total Normal Cost (NC) | \$332,757 | \$141,121 |

SECTION 2 - PRINCIPAL VALUATION RESULTS

Under GASB 45, the Annual Required Contribution (ARC) of the employer equals the Normal Cost plus a provision for amortizing the Unfunded Actuarial Accrued Liability. We have assumed level dollar amortization over the maximum acceptable amortization period of 30 years. For the period beginning July 1, 2015, the ARC, calculated under the parameters of this actuarial valuation, would be:

TABLE 2.4 - ANNUAL REQUIRED CONTRIBUTION and ANNUAL OPEB COST

| | <u>Partial Pre-Funding</u> | <u>Full Pre-Funding</u> |
|---|----------------------------|-------------------------|
| Discount Rate | 4% | 7.5% |
| 1. Normal Cost | \$332,757 | \$141,121 |
| 2. Unfunded Actuarial Accrued Liability | | |
| a. Actuarial Accrued Liability | \$6,904,487 | \$3,529,110 |
| b. Actuarial Value of Plan Assets | \$95,096 | \$95,096 |
| c. Unfunded Actuarial Accrued Liability | \$6,809,391 | \$3,434,014 |
| 3. Amortization of Unfunded Actuarial Accrued Liability | | |
| a. Unfunded Actuarial Accrued Liability | \$6,809,391 | \$3,434,014 |
| b. Amortization Period in years | 30 | 30 |
| c. Factor Increasing Rate | 0.0% | 0.0% |
| d. Amortization Factor | 17.98 | 12.70 |
| e. Amortization Amount (3.a. / 3.d.) | \$378,720 | \$270,395 |
| 4. Interest on 1. and 3.e. | \$28,459 | \$30,864 |
| 5. Annual Required Contribution (1. + 3.e. + 4.) | \$739,936 | \$442,380 |
| 6. Net OPEB Obligation, beginning of year | \$2,610,000 | Not Applicable |
| 7. Interest on Net OPEB Obligation at 4% | \$104,400 | Not Applicable |
| 8. Adjustment to Annual Required Contribution at 4% | (\$150,954) | Not Applicable |
| 9. Annual OPEB Cost (5. + 7. + 8.) | \$693,382 | Not Applicable |

SECTION 3 - GASB 45 ACCOUNTING DISCLOSURE

GASB 45 requires disclosure of the annual OPEB cost, the Net OPEB Obligation and the Schedule of Funding Progress. In addition, a summary of the Substantive Plan Provisions and information about the Actuarial Methods and Assumptions used in the valuation are disclosed, which are provided in Section 6 and Section 7, respectively.

| Annual OPEB Cost and Net OPEB Obligation¹ | | | |
|---|------------------|------------------|------------------|
| Fiscal Year Ending | <u>6/30/2016</u> | <u>6/30/2015</u> | <u>6/30/2014</u> |
| Discount rate | 4.00% | 4.00% | 4.00% |
| Annual Required Contribution | \$739,936 | \$590,000 | \$550,000 |
| Interest on Net OPEB Obligation | 104,400 | 84,800 | 66,800 |
| Adjustment to annual required contribution | (150,954) | (114,800) | (96,800) |
| Annual OPEB Cost | \$693,382 | \$560,000 | \$520,000 |
| Expected Benefit Payments | (80,020) | (70,000) | (70,000) |
| Employer contributions to OPEB Trust ² | (95,053) | - | - |
| Total employer contributions | (175,073) | (70,000) | (70,000) |
| Change in Net OPEB Obligation | \$518,309 | \$490,000 | \$450,000 |
| Net OPEB Obligation - beginning of year | \$2,610,000 | \$2,120,000 | \$1,670,000 |
| Net OPEB Obligation - end of year | \$3,128,309 | \$2,610,000 | \$2,120,000 |

¹ Entries for FY2015 and FY2014 are based on information in the Town's audited financial statements.

² Employer contributions to the OPEB Trust for FY2016 include a transfer of \$30,053 and a contribution of \$65,000, both made during FY2015.

| Plan History | | | | |
|---------------------|------------------|--|---------------------|--|
| Fiscal Year Ended | Annual OPEB Cost | Percentage of Annual OPEB Cost Contributed | Net OPEB Obligation | |
| 6/30/2016 | 693,382 | 25.2% | 3,128,309 | |
| 6/30/2015 | 560,000 | 12.5% | 2,610,000 | |
| 6/30/2014 | 520,000 | 13.5% | 2,120,000 | |

| Schedule of Funding Progress | | | | | | |
|-------------------------------------|-------------------------------|---------------------------------|---------------------------|--------------------|---------------------|---|
| Actuarial Valuation Date | Actuarial Value of Assets (a) | Actuarial Accrued Liability (b) | Unfunded AAL (UAAL) (b-a) | Funded Ratio (a/b) | Covered Payroll (c) | UAAL as a Percentage of Covered Payroll ((b-a) / c) |
| 7/1/2015 | 95,096 | 6,904,487 | 6,809,391 | 1.38% | 3,471,050 | 196.2% |
| 7/1/2012 | 0 | 4,180,000 | 4,180,000 | 0.00% | 3,540,000 | 118.1% |
| 7/1/2009 | 0 | 4,300,000 | 4,300,000 | 0.00% | 2,750,000 | 156.4% |

Town of Upton Postemployment Benefits Other Than Pensions
Actuarial Valuation as of July 1, 2015

SECTION 4 - FORECASTS

OVERVIEW

In Section 4, we have provided 30-year forecasts of the annual funding requirements, accrued liability, assets and unfunded actuarial accrued liability under a partially funded and fully funded scenario. The entries in Tables 4.1 and 4.2 are based on the assumptions stated below:

- ◆ Expected Benefit Payments are developed in the actuarial valuation and are based on the assumptions detailed in Section 7.
- ◆ Normal Cost is assumed to increase annually by 4%.
- ◆ Assets are assumed to grow annually at the selected discount rate plus OPEB Trust Contributions made at the end of each fiscal year.
- ◆ Actuarial Accrued Liability (AAL), end of year, equals AAL, beginning of year, plus Normal Cost less Expected Benefit Payments plus interest on these items.
- ◆ Unfunded Actuarial Accrued Liability (UAAL) equals the AAL less Assets.
- ◆ The Annual Required Contribution (ARC) is the sum of the Normal Cost, the Amortization Amount and Interest.

Table 4.1 is based on funding the Expected Benefit Payments on a pay-as-you-go basis.

- ◆ The assumed discount rate is 4%.
- ◆ Amortization Amount is the amount necessary to amortize the Unfunded Actuarial Accrued Liability over 30 years at a discount rate of 4% on an open amortization basis. The open amortization period is 30 years, recalculated at each valuation.

Table 4.2 is based on fully funding the Annual Required Contribution (ARC) each year.

- ◆ The assumed discount rate is 7.5%.
- ◆ Amortization Amount is the amount necessary to amortize the Unfunded Actuarial Accrued Liability over 30 years at a discount rate of 7.5% on a closed amortization basis. The closed amortization period is 30 years at year one declining to zero after 30 years. This method fully funds the UAL at the end of 30 years.
- ◆ Assumes OPEB Trust Contributions equal to the excess of the ARC over the Expected Benefit Payments.

SECTION 4 - FORECASTS

TABLE 4.1 - Funding Expected Benefit Payments plus \$15,000 OPEB Trust Contribution

| FYE June 30 | (1) Normal Cost | (2) Actuarial Accrued Liability | (3) Expected Benefit Payments | (4) Actuarial Value of Assets | (5) Unfunded Actuarial Accrued Liability (2) - (4) | (6) Amortization Amount | (7) Interest | (8) ARC (1) + (6) + (7) | (9) OPEB Trust Contributions |
|-------------|--------------------|------------------------------------|----------------------------------|----------------------------------|---|----------------------------|-----------------|----------------------------|---------------------------------|
| 2016 | 332,757 | 6,904,487 | 80,020 | 95,096 | 6,809,391 | 378,720 | 28,459 | 739,936 | - |
| 2017 | 346,067 | 7,445,129 | 81,943 | 95,225 | 7,349,904 | 408,782 | 30,194 | 785,043 | 100,000 |
| 2018 | 359,910 | 8,019,278 | 107,779 | 199,034 | 7,820,244 | 434,941 | 31,794 | 826,645 | - |
| 2019 | 374,306 | 8,604,442 | 138,187 | 206,995 | 8,397,447 | 467,044 | 33,654 | 875,004 | - |
| 2020 | 389,278 | 9,196,974 | 152,788 | 215,275 | 8,981,699 | 499,538 | 35,553 | 924,369 | - |
| 2021 | 404,849 | 9,813,888 | 180,060 | 223,886 | 9,590,002 | 533,371 | 37,529 | 975,749 | - |
| 2022 | 421,043 | 10,443,861 | 230,190 | 232,841 | 10,211,020 | 567,910 | 39,558 | 1,028,511 | - |
| 2023 | 437,885 | 11,064,751 | 253,133 | 242,155 | 10,822,596 | 601,924 | 41,592 | 1,081,401 | - |
| 2024 | 455,400 | 11,704,595 | 286,455 | 251,841 | 11,452,754 | 636,972 | 43,695 | 1,136,067 | - |
| 2025 | 473,616 | 12,354,267 | 334,980 | 261,915 | 12,092,352 | 672,545 | 45,846 | 1,192,007 | - |
| 2026 | 492,561 | 12,999,384 | 393,173 | 272,392 | 12,726,992 | 707,842 | 48,016 | 1,248,419 | - |
| 2027 | 512,263 | 13,630,663 | 403,715 | 283,288 | 13,347,375 | 742,346 | 50,184 | 1,304,793 | - |
| 2028 | 532,754 | 14,296,933 | 403,252 | 294,620 | 14,002,313 | 778,772 | 52,461 | 1,363,987 | - |
| 2029 | 554,064 | 15,011,637 | 429,068 | 306,405 | 14,705,232 | 817,866 | 54,877 | 1,426,807 | - |
| 2030 | 576,227 | 15,750,764 | 441,340 | 318,661 | 15,432,103 | 858,293 | 57,381 | 1,491,901 | - |
| 2031 | 599,276 | 16,529,990 | 404,791 | 331,407 | 16,198,583 | 900,922 | 60,008 | 1,560,206 | - |
| 2032 | 623,247 | 17,401,629 | 374,720 | 344,663 | 17,056,966 | 948,663 | 62,876 | 1,634,786 | - |
| 2033 | 648,177 | 18,363,730 | 410,998 | 358,450 | 18,005,280 | 1,001,406 | 65,983 | 1,715,566 | - |
| 2034 | 674,104 | 19,353,246 | 400,677 | 372,788 | 18,980,458 | 1,055,643 | 69,190 | 1,798,937 | - |
| 2035 | 701,068 | 20,419,832 | 369,047 | 387,700 | 20,032,132 | 1,114,134 | 72,608 | 1,887,810 | - |
| 2036 | 729,111 | 21,589,380 | 372,204 | 403,208 | 21,186,172 | 1,178,319 | 76,297 | 1,983,727 | - |
| 2037 | 758,275 | 22,831,656 | 397,907 | 419,336 | 22,412,320 | 1,246,514 | 80,192 | 2,084,981 | - |
| 2038 | 788,606 | 24,127,741 | 411,092 | 436,109 | 23,691,632 | 1,317,666 | 84,251 | 2,190,523 | - |
| 2039 | 820,150 | 25,493,768 | 441,787 | 453,553 | 25,040,215 | 1,392,670 | 88,513 | 2,301,333 | - |
| 2040 | 852,956 | 26,915,939 | 487,056 | 471,695 | 26,444,244 | 1,470,759 | 92,949 | 2,416,664 | - |
| 2041 | 887,074 | 28,382,949 | 518,607 | 490,563 | 27,892,386 | 1,551,301 | 97,535 | 2,535,910 | - |
| 2042 | 922,557 | 29,911,946 | 557,968 | 510,186 | 29,401,760 | 1,635,248 | 102,312 | 2,660,117 | - |
| 2043 | 959,459 | 31,498,865 | 589,582 | 530,593 | 30,968,272 | 1,722,373 | 107,273 | 2,789,105 | - |
| 2044 | 997,837 | 33,155,399 | 611,852 | 551,817 | 32,603,582 | 1,813,325 | 112,446 | 2,923,608 | - |
| 2045 | 1,037,750 | 34,895,396 | 626,172 | 573,890 | 34,321,506 | 1,908,871 | 117,865 | 3,064,486 | - |
| 2046 | 1,079,260 | 36,731,898 | 659,856 | 596,846 | 36,135,052 | 2,009,736 | 123,560 | 3,212,556 | - |

Town of Upton Postemployment Benefits Other Than Pensions
Actuarial Valuation as of July 1, 2015

30 years open, 4% discount rate.

SECTION 4 - FORECASTS

TABLE 4.2 - Funding the Annual Required Contribution (ARC)

| FYE June 30 | (1) Normal Cost | (2) Actuarial Accrued Liability | (3) Expected Benefit Payments | (4) Actuarial Value of Assets | (5) Unfunded Actuarial Accrued Liability (2) - (4) | (6) Amortization Amount | (7) Interest | (8) ARC (1) + (6) + (7) | (9) OPEB Trust Contributions |
|----------------|--------------------|---------------------------------------|--|-------------------------------------|--|-------------------------------|-----------------|-------------------------------|------------------------------------|
| 2016 | 141,121 | 3,529,110 | 80,020 | 95,096 | 3,434,014 | 270,395 | 30,864 | 442,380 | - |
| 2017 | 146,766 | 3,862,532 | 81,943 | 95,225 | 3,767,307 | 299,706 | 33,485 | 479,957 | 100,000 |
| 2018 | 152,637 | 4,225,035 | 107,779 | 199,350 | 4,025,685 | 323,608 | 35,718 | 511,963 | 404,184 |
| 2019 | 158,742 | 4,594,250 | 138,187 | 614,517 | 3,979,733 | 323,556 | 36,172 | 518,470 | 380,283 |
| 2020 | 165,092 | 4,966,191 | 152,788 | 1,035,800 | 3,930,391 | 323,489 | 36,644 | 525,225 | 372,437 |
| 2021 | 171,696 | 5,357,715 | 180,060 | 1,480,296 | 3,877,419 | 323,658 | 37,152 | 532,506 | 352,446 |
| 2022 | 178,564 | 5,757,427 | 230,190 | 1,937,134 | 3,820,293 | 323,480 | 37,653 | 539,697 | 309,507 |
| 2023 | 185,707 | 6,142,524 | 253,133 | 2,383,450 | 3,759,074 | 323,500 | 38,191 | 547,398 | 294,265 |
| 2024 | 193,135 | 6,540,394 | 286,455 | 2,847,153 | 3,693,241 | 323,685 | 38,762 | 555,582 | 269,127 |
| 2025 | 200,860 | 6,941,541 | 334,980 | 3,319,269 | 3,622,272 | 323,706 | 39,342 | 563,908 | 228,928 |
| 2026 | 208,894 | 7,330,766 | 393,173 | 3,784,808 | 3,545,958 | 323,536 | 39,932 | 572,362 | 179,189 |
| 2027 | 217,250 | 7,697,484 | 403,715 | 4,233,380 | 3,464,104 | 323,446 | 40,552 | 581,248 | 177,533 |
| 2028 | 225,940 | 8,089,758 | 403,252 | 4,713,551 | 3,376,207 | 323,702 | 41,223 | 590,865 | 187,613 |
| 2029 | 234,978 | 8,521,275 | 429,068 | 5,239,832 | 3,281,443 | 323,614 | 41,894 | 600,486 | 171,418 |
| 2030 | 244,377 | 8,968,105 | 441,340 | 5,788,438 | 3,179,667 | 323,466 | 42,588 | 610,431 | 169,091 |
| 2031 | 254,152 | 9,445,827 | 404,791 | 6,375,411 | 3,070,416 | 323,542 | 43,327 | 621,021 | 216,230 |
| 2032 | 264,318 | 10,007,781 | 374,720 | 7,054,892 | 2,952,889 | 323,427 | 44,081 | 631,826 | 257,106 |
| 2033 | 274,891 | 10,653,988 | 410,998 | 7,827,317 | 2,826,671 | 323,418 | 44,873 | 643,182 | 232,184 |
| 2034 | 285,887 | 11,322,413 | 400,677 | 8,631,416 | 2,690,997 | 323,437 | 45,699 | 655,023 | 254,346 |
| 2035 | 297,322 | 12,063,492 | 369,047 | 9,518,364 | 2,545,128 | 323,808 | 46,585 | 667,715 | 298,668 |
| 2036 | 309,215 | 12,905,239 | 372,204 | 10,517,320 | 2,387,919 | 323,566 | 47,459 | 680,240 | 308,036 |
| 2037 | 321,584 | 13,819,629 | 397,907 | 11,600,450 | 2,219,179 | 323,495 | 48,381 | 693,460 | 295,553 |
| 2038 | 334,447 | 14,789,245 | 411,092 | 12,751,385 | 2,037,860 | 323,470 | 49,344 | 707,261 | 296,169 |
| 2039 | 347,825 | 15,831,740 | 441,787 | 13,988,771 | 1,842,969 | 323,896 | 50,379 | 722,100 | 280,313 |
| 2040 | 361,738 | 16,934,978 | 487,056 | 15,301,974 | 1,633,004 | 323,367 | 51,383 | 736,488 | 249,432 |
| 2041 | 376,208 | 18,088,979 | 518,607 | 16,681,120 | 1,407,859 | 323,646 | 52,489 | 752,343 | 233,736 |
| 2042 | 391,256 | 19,312,373 | 557,968 | 18,146,844 | 1,165,529 | 323,758 | 53,626 | 768,640 | 210,672 |
| 2043 | 406,906 | 20,602,888 | 589,582 | 19,697,984 | 904,904 | 323,180 | 54,756 | 784,842 | 195,260 |
| 2044 | 423,182 | 21,974,237 | 611,852 | 21,348,883 | 625,354 | 324,018 | 56,040 | 803,240 | 191,388 |
| 2045 | 440,109 | 23,442,844 | 626,172 | 23,118,908 | 323,936 | 323,936 | 57,303 | 821,348 | 195,176 |
| 2046 | 457,713 | 25,024,946 | 659,856 | 25,024,946 | - | - | 34,328 | 492,041 | - |

Town of Upton Postemployment Benefits Other Than Pensions
Actuarial Valuation as of July 1, 2015

30 years closed, 7.5% discount rate.

SECTION 4 - FORECASTS

TABLE 4.3 - ANNUAL OPEB COST and NET OPEB OBLIGATION

| FYE June 30 | ARC | Interest on Net OPEB Obligation | ARC Adjustment | Amortization Factor | Annual OPEB Cost | Employer Contributions | Change in Net OPEB Obligation | Net OPEB Obligation Balance |
|----------------|-----------|---------------------------------------|-------------------|------------------------|---------------------|---------------------------|-------------------------------------|-----------------------------------|
| | | | | | | | | 2,610,000 |
| 2016 | 739,936 | 104,400 | (150,954) | 17.29 | 693,382 | 175,073 | 518,309 | 3,128,309 |
| 2017 | 785,043 | 125,132 | (180,932) | 17.29 | 729,243 | 181,943 | 547,300 | 3,675,609 |
| 2018 | 826,645 | 147,024 | (212,586) | 17.29 | 761,083 | 107,779 | 653,304 | 4,328,913 |
| 2019 | 875,004 | 173,157 | (250,371) | 17.29 | 797,790 | 138,187 | 659,603 | 4,988,516 |
| 2020 | 924,369 | 199,541 | (288,520) | 17.29 | 835,390 | 152,788 | 682,602 | 5,671,118 |
| 2021 | 975,749 | 226,845 | (328,000) | 17.29 | 874,594 | 180,060 | 694,534 | 6,365,652 |
| 2022 | 1,028,511 | 254,626 | (368,170) | 17.29 | 914,967 | 230,190 | 684,777 | 7,050,429 |
| 2023 | 1,081,401 | 282,017 | (407,775) | 17.29 | 955,643 | 253,133 | 702,510 | 7,752,939 |
| 2024 | 1,136,067 | 310,118 | (448,406) | 17.29 | 997,779 | 286,455 | 711,324 | 8,464,263 |
| 2025 | 1,192,007 | 338,571 | (489,547) | 17.29 | 1,041,031 | 334,980 | 706,051 | 9,170,314 |

Notes:

1. ARC and Employer Contributions are from 30-Year Forecast of Annual Required Contributions (Table 4.1).
2. Interest on Net OPEB Obligation is computed on the prior year Net OPEB Obligation Balance.
3. ARC Adjustment is the prior year Net OPEB Obligation Balance amortized over 30 years.
4. OPEB Cost is the ARC plus Interest on Net OPEB Obligation plus ARC Adjustment.
5. Change in Net OPEB Obligation is the difference between the OPEB Cost and Employer Contributions.
6. Net OPEB Obligation is the prior year Net OPEB Obligation Balance plus Change in Net OPEB Obligation.
7. Year one Interest on Net OPEB Obligation and ARC Adjustment computed at prior discount rate of 4.0%.
8. Subsequent years' Interest on Net OPEB Obligation and ARC Adjustment computed at current discount rate of 4.0%.

SECTION 5 - SENSITIVITY ANALYSIS

Below we illustrate the sensitivity of the Actuarial Accrued Liability and the Annual Required Contribution to a one percentage increase and decrease in the discount rate:

TABLE 5.1 - DISCOUNT RATE ASSUMPTION

| | <u>Discount Rate -1%</u> | <u>Assumed Discount Rate</u> | <u>Discount Rate +1%</u> |
|--------------------------------------|------------------------------|----------------------------------|------------------------------|
| Discount Rate | 3% | 4% | 5% |
| Actuarial Accrued Liability | | | |
| Current Active Employees | \$7,432,398 | \$5,726,541 | \$4,521,090 |
| Current Retirees | 1,341,684 | 1,177,946 | 1,041,924 |
| Total Actuarial Accrued Liability | \$8,774,082 | \$6,904,487 | \$5,563,014 |
| Change % | 27.08% | | -19.43% |
| Annual Required Contribution | | | |
| Normal Cost | \$449,273 | \$332,757 | \$253,103 |
| Actuarial Accrued Liability | \$8,774,082 | \$6,904,487 | \$5,563,014 |
| Actuarial Value of Assets | 95,096 | 95,096 | 95,096 |
| Unfunded Actuarial Accrued Liability | \$8,678,986 | \$6,809,391 | \$5,467,918 |
| Amortization Payment | 429,866 | 378,720 | 338,781 |
| Interest | 26,374 | 28,459 | 29,594 |
| Annual Required Contribution | \$905,513 | \$739,936 | \$621,478 |
| Change % | 22.38% | | -16.01% |

SECTION 5 - SENSITIVITY ANALYSIS

Below we illustrate the sensitivity of the Actuarial Accrued Liability and the Annual Required Contribution to a one percentage increase and decrease in health care cost trend assumption for each future year:

TABLE 5.2 - HEALTH CARE COST TREND ASSUMPTION

| | <u>Trend -1%</u> | <u>Assumed Trend</u> | <u>Trend +1%</u> |
|--------------------------------------|------------------|--------------------------|------------------|
| Discount Rate | 4% | 4% | 4% |
| Actuarial Accrued Liability | | | |
| Current Active Employees | \$4,357,591 | \$5,726,541 | \$7,855,322 |
| Current Retirees | 1,046,027 | 1,177,946 | 1,351,401 |
| Total Actuarial Accrued Liability | \$5,403,618 | \$6,904,487 | \$9,206,723 |
| | | | |
| Change % | -21.74% | | 33.34% |
| | | | |
| Annual Required Contribution | | | |
| Normal Cost | \$241,399 | \$332,757 | \$478,746 |
| Actuarial Accrued Liability | \$5,403,618 | \$6,904,487 | \$9,206,723 |
| Actuarial Value of Assets | 95,096 | 95,096 | 95,096 |
| Unfunded Actuarial Accrued Liability | \$5,308,522 | \$6,809,391 | \$9,111,627 |
| Amortization Payment | 295,246 | 378,720 | 506,765 |
| Interest | 21,466 | 28,459 | 39,420 |
| Annual Required Contribution | \$558,111 | \$739,936 | \$1,024,931 |
| | | | |
| Change % | -24.57% | | 38.52% |

SECTION 6 - PLAN PROVISIONS

Retirement Eligibility: Group 1 employees hired before April 2, 2012: retire after attaining age 55 with 10 or more years of service or any age with 20 or more years of service

Group 1 employees hired after April 1, 2012: retire after attaining age 60 with 10 or more years of service

Group 4 employees hired before April 2, 2012: retire after attaining age 55 or any age with 20 or more years of service

Group 4 employees hired after April 1, 2012: retire after attaining age 55

Ordinary Disability Eligibility: Any member who is unable to perform his or her duties due to a non-occupational disability and has ten or more years of creditable service.

Accidental Disability Eligibility: Any member who is unable to perform his or her duties due to a job-related disability.

Medical Premium Rates: The total monthly costs by plan are shown below:

| <u>Non-Medicare Plans - July 1, 2016</u> | <u>Individual</u> | <u>Family</u> |
|---|-------------------|---------------|
| HMO Blue | \$924.77 | \$2,404.44 |
| <u>Medicare Plans - January 1, 2016</u> | | |
| Medex w/ Blue Medicare Rx | \$313.67 | |

Participant Contributions: Retired employees contribute 50% of the total medical premium rates.

Continuation of Coverage to Spouse After Death of Retiree: Surviving spouse may continue coverage for lifetime by paying the required medical premium rate.

SECTION 6 - PLAN PROVISIONS

- Life Insurance Benefit:** Retirees are eligible for a \$2,000 life insurance benefit.
- Life Insurance Premium:** The total monthly cost is \$.56.
- Life Insurance** Retired employees contribute \$.28 of the monthly life insurance premium.
- PPACA Excise Tax:** The Patient Protection and Affordable Care Act (PPACA) applies a 40% excise tax, commonly referred to as the "Cadillac Tax", to the cost of plan benefits in excess of statutory thresholds beginning in 2020. The 2020 thresholds are assumed to be \$10,820 for individual and \$29,175 for family coverage and increase by the Consumer Price Index (CPI) in future years. The annual limits are increased by \$1,750 for individual and \$3,660 for family coverage for retirees not eligible for Medicare benefits.

SECTION 7 - ACTUARIAL ASSUMPTIONS AND METHODS

Valuation Date: July 1, 2015

Discount Rates: 4.00% partial pre-funding.
7.50% full pre-funding.

Amortization Method: Level dollar amount per year over 30 years on an open amortization period for partial pre-funding.
Level dollar amount per year over 30 years on a closed amortization period for full pre-funding.

| Health Care Cost Trend | <u>Year</u> | <u>Trend</u> |
|-------------------------------|-------------|--------------|
| | 1 | 7.00% |
| | 2 | 6.50% |
| | 3 | 6.00% |
| | 4 | 5.50% |
| | Ultimate | 5.00% |

Consumer Price Index (CPI): 3% per year.

Medical Plan Participation: 75% of eligible retirees will elect medical coverage upon retirement.

Life Insurance Participation: 75% of eligible retirees will elect life insurance coverage upon retirement.

Dependent Status: Male spouses are assumed to be three years older and female spouses are assumed to be three years younger than the retired employee.

70% of male employees and 50% of female employees are assumed to retire with a covered spouse.

For current retirees, the actual census information provided is used.

SECTION 7 - ACTUARIAL ASSUMPTIONS AND METHODS

Medical Per Capita Costs: Annual per capita costs for the fiscal year beginning July 1, 2015 are as follows:

| <u>Age</u> | <u>Male</u> | <u>Female</u> |
|------------|-------------|---------------|
| Under 20 | \$3,867 | \$4,540 |
| 20-24 | \$3,047 | \$4,834 |
| 25-29 | \$3,171 | \$7,130 |
| 30-34 | \$3,983 | \$9,010 |
| 35-39 | \$4,996 | \$9,280 |
| 40-44 | \$6,226 | \$9,505 |
| 45-49 | \$7,857 | \$10,433 |
| 50-54 | \$10,355 | \$12,273 |
| 55-59 | \$13,457 | \$14,191 |
| 60-64 | \$17,269 | \$16,890 |
| 65-69 | \$3,347 | \$3,259 |
| 70-74 | \$4,011 | \$3,845 |
| 75-79 | \$4,736 | \$4,461 |
| 80-84 | \$5,444 | \$5,116 |
| 85-89 | \$6,065 | \$5,719 |
| 90-94 | \$6,602 | \$6,104 |
| 95+ | \$7,017 | \$5,903 |

Retiree Contributions: Annual average per capita participant contributions for the fiscal year beginning July 1, 2015 are as follows:

| <u>Plan</u> | <u>Retiree Contribution</u> |
|--------------|-----------------------------|
| Pre-Medicare | \$10,371 |
| Medicare | \$3,639 |

Excise Tax: For purposes of estimating the excise tax, per capita plan costs are developed for individual and family coverage for both Medicare and non-Medicare members. These plan costs are compared to the thresholds stipulated in the Patient Protection and Affordable Care Act (PPACA). Beginning in 2020, a 40% excise tax is applied on the excess of the plan costs over the thresholds, which increase annually by CPI.

Actuarial Cost Method: Projected Unit Credit. The costs of each employee's postemployment benefits are allocated on a pro rata basis from the employee's date of hire to the date the employee is fully eligible for benefits.

Employee Data: Employee and retiree data were submitted by the Town. We made reasonable adjustments for missing or invalid data.

SECTION 7 - ACTUARIAL ASSUMPTIONS AND METHODS

Pre-Retirement Mortality: Pre-retirement mortality rates for General and Public Safety employees are based on the RP-2000 Employees Male/Female BB Gen Base 2009 Mortality Table, base year 2009, projected with full generational mortality using Scale BB.

Post-Retirement Mortality: Post-retirement mortality rates for General and Public Safety employees are based on the RP-2000 Healthy Annuitant Male/Female Mortality Table, base year 2009, projected with full generational mortality using Scale BB.

Turnover Rates: Turnover rates for General and Public Safety employees are as follows:

| Service | Group 1 | Group 4 |
|---------|---------|---------|
| 0 | 15.0% | 1.5% |
| 5 | 7.6% | 1.5% |
| 10 | 5.4% | 1.5% |
| 15 | 3.3% | 0.0% |
| 20 | 2.0% | 0.0% |

Disability Rates: Disability rates for General and Public Safety employees are as follows:

| Age | Group 1 | Group 4 |
|-----|---------|---------|
| 20 | 0.01% | 0.10% |
| 30 | 0.03% | 0.30% |
| 40 | 0.10% | 0.30% |
| 50 | 0.19% | 1.25% |

55% of the General employee disabilities are job-related.

90% of the Public Safety employee disabilities are job-related.

SECTION 7 - ACTUARIAL ASSUMPTIONS AND METHODS

Retirement Rates: Retirement rates for General and Public Safety employees are as follows:

| <u>Age</u> | <u>Group 1</u> | | <u>Group 4</u> |
|------------|----------------|---------------|----------------|
| | <u>Male</u> | <u>Female</u> | <u>All</u> |
| 50 | 1.0% | 1.5% | 2.0% |
| 51 | 1.0% | 1.5% | 2.0% |
| 52 | 1.0% | 2.0% | 2.0% |
| 53 | 1.0% | 2.5% | 5.0% |
| 54 | 2.0% | 2.5% | 7.5% |
| 55 | 2.0% | 5.5% | 15.0% |
| 56 | 2.5% | 6.5% | 10.0% |
| 57 | 2.5% | 6.5% | 10.0% |
| 58 | 5.0% | 6.5% | 10.0% |
| 59 | 6.5% | 6.5% | 15.0% |
| 60 | 12.0% | 5.0% | 20.0% |
| 61 | 20.0% | 13.0% | 20.0% |
| 62 | 30.0% | 15.0% | 25.0% |
| 63 | 25.0% | 12.5% | 25.0% |
| 64 | 22.0% | 18.0% | 30.0% |
| 65 | 40.0% | 15.0% | 100.0% |
| 66 | 25.0% | 20.0% | |
| 67 | 25.0% | 20.0% | |
| 68 | 30.0% | 25.0% | |
| 69 | 30.0% | 20.0% | |
| 70 | 100.0% | 100.0% | |

SECTION 8 - PLAN MEMBER INFORMATION

TABLE 8.1 - ACTIVE EMPLOYEES BY AGE and YEARS OF SERVICE AS OF JULY 1, 2015

| Age | Years of Service | | | | | | | | | Total | Percent |
|----------|------------------|--------|----------|------------------|----------|----------|----------|----------|---------|-------|---------|
| | 0 to 4 | 5 to 9 | 10 to 14 | 15 to 19 | 20 to 24 | 25 to 29 | 30 to 34 | 35 to 39 | 40 & up | | |
| Under 25 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 4% |
| 25 to 29 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 7% |
| 30 to 34 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 9% |
| 35 to 39 | 4 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 13% |
| 40 to 44 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 4% |
| 45 to 49 | 1 | 2 | 1 | 2 | 1 | 0 | 0 | 0 | 0 | 7 | 13% |
| 50 to 54 | 3 | 3 | 1 | 1 | 1 | 6 | 1 | 0 | 0 | 16 | 27% |
| 55 to 59 | 2 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 5 | 9% |
| 60 to 64 | 0 | 0 | 2 | 1 | 0 | 1 | 0 | 1 | 0 | 5 | 9% |
| 65 to 69 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0% |
| 70 & up | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 3 | 5% |
| Total | 19 | 11 | 6 | 5 | 4 | 9 | 1 | 1 | 0 | 56 | |
| Percent | 33% | 20% | 11% | 9% | 7% | 16% | 2% | 2% | 0% | | 100% |
| | Average Age: | | 47.6 | Average Service: | | | 12.4 | | | | |

SECTION 8 - PLAN MEMBER INFORMATION

TABLE 8.2 - RETIRED EMPLOYEES, COVERED SPOUSES and SURVIVORS AS OF JULY 1, 2015

| Age | Non-Medicare Plans | Medicare Plans | Life | Total |
|------------------------|--------------------|--------------------------------------|------------------|-----------|
| | <i>HMO Blue</i> | <i>Medex w/ Blue Medicare Rx</i> | <i>Life Only</i> | |
| Under 40 | 0 | 0 | 0 | 0 |
| 40 to 44 | 0 | 0 | 0 | 0 |
| 45 to 49 | 0 | 0 | 0 | 0 |
| 50 to 54 | 0 | 0 | 0 | 0 |
| 55 to 59 | 0 | 0 | 0 | 0 |
| 60 to 64 | 1 | 1 | 0 | 2 |
| 65 to 69 | 0 | 5 | 0 | 5 |
| 70 to 74 | 0 | 5 | 0 | 5 |
| 75 to 79 | 0 | 1 | 0 | 1 |
| 80 to 84 | 0 | 0 | 0 | 0 |
| 85 to 89 | 0 | 0 | 0 | 0 |
| 90+ | 0 | 0 | 0 | 0 |
| Total | 1 | 12 | 0 | 13 |
| Covered Spouses | 0 | 6 | | 6 |

SECTION 9 - GASB 45 GLOSSARY OF TERMS

Actuarial Accrued Liability – The portion of the Actuarial Present Value of future benefits which is allocated to all periods prior to a valuation year and therefore is not provided by future Normal Costs.

Actuarial Assumptions – Assumptions as to the occurrence of future events affecting OPEB costs, such as mortality, withdrawal, disablement and retirement; changes in compensation and Government provided pension 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 Present Value of Future Benefits – The present value of the cost to finance all benefits payable in the future, discounted to reflect the probability of payment and the time value of money.

Actuarial Valuation – the determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets and related Actuarial Present Values for an OPEB plan.

Actuarial Value of Assets – The value of plan assets used in an actuarial valuation. The Actuarial Value of Assets may reflect smoothing techniques intended to dampen year-to-year fluctuations in the market value of assets.

Annual OPEB Cost - The accrual basis annual cost for the OPEB plan sponsored by the employer. In the year of implementation of GASB 45, the Annual OPEB Cost equals the ARC. In subsequent years, if an employer has a Net OPEB Obligation, Annual OPEB Cost equals the ARC plus one year's interest on the Net OPEB Obligation plus an adjustment to the ARC.

Annual Required Contribution (ARC) – Includes the employer's Normal Cost and a provision for amortizing the Unfunded Actuarial Accrued Liability.

Expected Benefit Payments – Those OPEB amounts that are expected to be paid by the employer at various future times under a particular set of Actuarial Assumptions, taking into account such times as the advancement in age and past and future service credits.

Explicit Subsidy – The difference between (a) the blended rates based on combined active and retired member experience and (b) actual cash contributions made by the employer.

Funded Ratio – The Actuarial Value of Assets expressed as a percentage of the Actuarial Accrued Liability.

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

SECTION 9 - GASB 45 GLOSSARY OF TERMS

Implicit 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 and (b) the blended rates based on combined active and retired member experience.

Net OPEB Obligation – The cumulative excess since adoption of GASB 45 of Annual OPEB Cost over the employer's contributions to the plan.

Normal Cost – The portion of the Actuarial Present Value of Future Benefits which is allocated to a valuation year.

OPEB – Other Postemployment Benefits including medical, dental, vision, hearing and life insurance benefits.

Plan Assets – Investments segregated and restricted in a trust or similar arrangement under which:

- employer contributions to the trust are irrevocable,
- assets are dedicated to providing plan benefits, and
- assets are legally protected from creditors.

Pay-As-You-Go – A method of financing an OPEB 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.

Present Value of Future Benefits – The actuarial present value of the cost to finance benefits payable in the future, discounted to reflect the expected effects of the time value of money and the probabilities of payment.

Projected Unit Credit Actuarial Cost Method – A method under which the projected benefits of each individual included in an Actuarial Valuation are allocated by a consistent formula to valuation years. Projected Unit Credit is one of the actuarial cost methods allowed and most often used for developing liabilities under GASB 45.

Substantive Plan – The terms of an OPEB plan as understood by the employer and plan members.

Unfunded Actuarial Accrued Liability – The excess of Actuarial Accrued Liability over the Actuarial Value of Assets.