# Town of Little Compton

The Town of Little Compton uses the Alternative Calculation method due to its size.

This document includes the 2013 OPEB Cost and Liability reports for the following:

Public Safety (Fire & Police)

School Certified (Teachers)

School Non-Certified (educational support)

# FINAL

# ACOPEB

## Report on the OPEB Costs and Liability

## Little Compton Public Safety

## For the Year Ending June 30, 2013

## 11/14/2013

## Table of Contents



**Appendices:**

## Description of Report

This report was prepared using ACOPEB.com software to satisfy the requirements of Government Accounting Standards Board Statement No. 45 (GASB 45). This Statement requires that the annual cost and liability associated with other post employment benefits (OPEB) be computed and gradually brought onto the governments' books. If the Little Compton Public Safety is using this report to comply with GASB 45, then the Little Compton Public Safety has under 100 participants covered under the plan and is eligible for the alternative measurement method.

This report provides four primary results: the Actuarial Accrued Liability (AAL), the Unfunded Actuarial Accrued Liability (UAAL), the Annual Required Contribution (ARC), and the Net OPEB Obligation.

**The Actuarial Accrued Liability (AAL)** is the total projected liability for the post employment benefits covered under the plan. The AAL calculation uses the data on active employees, employees who have left employment but who are eligible for retiree healthcare, current retirees and their beneficiaries, and spouses who are eligible for the retiree healthcare benefit provided by the Little Compton Public Safety. This information along with a set of economic assumptions (see page 8) is used to project the cost of these future benefits and then do an actuarial analysis on the future cost of the benefits to arrive at the AAL. These computations can be found in the appendix.

**Unfunded Actuarial Accrued Liability (UAAL)** is the AAL less the value of plan assets. Any plan assets used to reduce AAL will have been reported in a fiduciary fund on the fund financial statements.

**Annual Required Contribution (ARC)** is the current amortization of the UAAL and the normal costs that need to be reported in the basic financial statements.

**Net OPEB Obligation** is the ARC less certain contributions that can be counted as payment toward the ARC plus any prior year OPEB obligations.

For financial statement purposes, GASB 45 impacts the government-wide and/or the proprietary fund statements but does not affect the governmental fund financial statements. The ARC and Net OPEB Obligation will be among the adjusting entries made to convert the governmental funds from the modified accrual basis to the full accrual basis. The ARC amount will be expensed on the government-wide statement of activities. The Net OPEB Obligation amount will be reported as a liability on the government-wide statement of net assets. For proprietary funds, the impact of GASB 45 affects the fund financial statements, with the Net OPEB Obligation being reported as a liability and the ARC as an expense.

Additional note disclosures and required supplementary information (RSI) are required as a result of GASB 45. The portion of this disclosure related specifically to the computations has been provided on page 5.

# Results of the ACOPEB Calculation

| | | |
|---|---|---|
| Normal cost (current service cost) | $ | 56,877 |
| Amortization of UAAL (for past service) | | 109,151 |
| **Annual Required Contribution (ARC)** | | 166,028 |
| Interest on beginning net OPEB obligation | | 9,805 |
| ARC adjustment | | (11,103) |
| **Annual OPEB expense** | | 164,730 |
| Actual active employee matching contributions | | 0 |
| **Employer Portion of Annual OPEB expense** | | 164,730 |
| Actual current year employer contribution and/or payment | | 153,293 |
| Increase in OPEB obligation | | 11,437 |
| **Net OPEB obligation at beginning of year** | | 245,121 |
| **Net OPEB obligation at end of year** | | 256,558 |

| | | |
|---|---|---|
| Covered payroll | 454,765 | |
| Annual OPEB expense as a % of covered payroll | 36.51 | % |

## Source for Government-Wide Adjustments

| | |
|---|---|
| OPEB Expense presented in Government-wide Statement of Activities | **164,730** |
| Liability on the Government-wide Statement of Net Assets | **256,558** |

# OPEB Information for Note Disclosure and Required Supplementary Information

| | | Current Calculation |
|---|---|---|
| Actuarial accrued liabilities (AAL) | $ | 2,409,636 |
| Actuarial value of plan assets | | 0 |
| Unfunded actuarial accrued liabilities (UAAL) | | 2,409,636 |
| Funded Ratio | | 0 % |
| | | |
| Covered Payroll | $ | 454,765 |
| UAAL as % of Covered Payroll | | 529.86 % |

# Calculation of the Amortization of UAAL

| Amortization Component | |
|---|---|
| AAL | 2,409,636 |
| Less: Assets | 0 |
| UAAL | 2,409,636 |
| Divided by PV factor | 22.9592 |
| Amortization Payment | 104,953 |
| Current year interest | 4,198 |
| Total Amortization Payment | 109,151 |

## How the Results Affect Your Annual Financial Report

This report provides your organization's annual OPEB expense amount and the net OPEB obligation at the end of the year both of which will be reported in your financial statements. Additionally, the portion of the required note disclosure related specifically to the computations has been provided on page 5.

This report presents the ARC and net OPEB obligation as a total for the entire plan. In many cases it will be necessary to allocate the OPEB expense and net OPEB obligation between governmental and proprietary funds and/or to different programs within the government. When preparing the relative percentages to allocate these amounts, it is important to note that the retired members will not be represented in any current year FTE or payroll statistics. As a result, it may be most accurate when creating the relative percentages to use the plan data provided in this report, and then to determine where the retired members (including associated spouses) worked when creating the relative percentages.

**Applying the OPEB expense and Net OPEB Obligation Amount to your financial statements.**

If your organization only has governmental funds, the OPEB expense and net OPEB obligation are reported only on the government-wide financial statements.

If your organization has proprietary funds, the portion of the OPEB expense and the net OPEB obligation attributable to each proprietary fund is reported in the proprietary fund financial statements and on the government-wide financial statements.

# Report Assumptions

| | |
|---|---|
| Assumed retirement age | 54 |
| Discount rate | 4% |
| Average salary increase | 2% |
| Medical insurance premium increases (for both active and retired participants) | |
| Year 1 | 3% |
| Year 2 | 3% |
| Year 3 | 3% |
| Year 4 | 3% |
| Year 5 | 3% |
| Year 6 | 3% |
| Years 7-10 | 3% |
| Years 11-21 | 3% |
| Years 21 on | 3% |

Note: The medical insurance premium increases should be reasonably comparable with those found in the *National Health Care Expenditures Projections* of the Office of the actuary at the Centers for Medicare and Medicaid Services in 2007.

The probability of remaining employed until retirement age from current and entry age by age comes from the Table 1 in GASB Statement 45.

Life expectancy by gender comes from the *Life Expectancy Table* from National Center for Health Statistics updated in 2008.

## Disclaimer

The Little Compton Public Safety provided all the information entered into ACOPEB.com necessary for the successful completion of the work. The Little Compton Public Safety attests that the data provided is accurate, reflects reasonable assumptions, and is consistent with that required for calculation of OPEB costs and obligations. The Little Compton Public Safety attests that the accuracy of the OPEB calculations is dependent on the accuracy of the data and holds harmless AFS Associates, Inc. from any misstatement of the Government's data.

AFS Associates, Inc provided the software to prepare this report on OPEB costs and obligations to meet the requirements of the alternative measurement methodology of GASB 45. However, AFS Associates, Inc. has not audited the data provided by the Little Compton Public Safety and accordingly does not express an opinion on the quality or accuracy of the Government's data and is held harmless for the effects of any errors or misstatement of the results caused by inaccurate data or assumptions.

# APPENDIX

**Methodology** – A detailed description of how the calculations are done.

**Present Value Computation** – The columns in the table shows the calculation of the future benefits for each plan member for each future year. The individual year present values are calculated and then totaled to arrive at a total present value of future benefits for each plan member.

**ARC and AAL Using the Entry Age Actuarial Cost Method** – Shows the calculation of the normal cost at current age and the actuarial accrued liability (AAL) using the present value of future benefits for individual plan members from the previous table.

# Methodology

The methodology used for calculating the normal the annual required contribution and the actuarial accrued liability follows the process used in the example found in GASB Statement 45. However, ACOPEB.com uses only the entry age actuarial cost method (also called entry age normal actuarial cost method) of calculation and the level percent of payroll option. This is the methodology AFS Associates, Inc. believes is used by the majority of pension and OPEB plans.

ACOPEB.com uses the data entered as economic assumptions and member data to calculate the actuarial present value of future benefits for each individual. This projection uses the assumed retirement age for members of the plan and the employer's portion of health insurance premiums for current retirees and spouses as a statistical base to forecast the cost of future benefits. The projections differentiate between members who are Medicare eligible and those who are not. Premiums are inflated using future insurance premium increase assumptions. The life expectancy and thus the number of years benefits are projected to be received, is estimated based on the Expectation of Life by Age and Sex in the U.S. table prepared by the National Center for Health Statistics and updated in 2008. The assumed retirement age for active members and their spouses is adjusted to reflect any eligibility requirement, such as a vesting period, by entering an eligible retirement age in the member data for each active member. (For example, an active member is 62 years of age and has 3 years of service and the plan has an assumed retirement age of 65 with a vesting requirement of 10 years. For this member, the age entered in the eligibility requirements is 72 years of age. Benefits will begin at age 72 rather than the assumed retirement age of 65.) The benefits will begin at the eligible retirement age if greater than the assumed retirement age. If there is a minimum age requirement for spouses this will adjust when benefits start being received.

Unidentified former members who may be eligible for benefits are not included in the calculations. Children of active members are not considered in the calculations. Children of retirees receiving benefits are included as additional retired members in the member records. They are included for benefits until they reach the age when benefits terminate, as dictated by the plan.

The current annual premium for an active member represents what the plan is now paying for a retiree member or their spouse. For a retired member the current annual premium is the actual amount the plan paid for that member. As a result, the premiums entered for an active employee and spouse will be very similar, if not the same, as existing retired members and spouses.

A second premium amount is entered for when a member becomes eligible for Medicare. The Medicare premium for each member in the member records should be the amount of annual premiums covered by the plan which could include both the medicare premium and supplemental insurance premiums. The premiums are entered for each member in the member records. If a member is not eligible for Medicare, the Medicare premium value would be 0.

If the assumed retirement age is at or above that necessary to be eligible for Medicare, then the amount entered for both premiums would be the annual Medicare eligible premium. If the assumed retirement age is below the Medicare eligible age, the premium would be based on what the plan is now paying for retired members who are not Medicare eligible.

The annual premium is projected into the future for each member and their spouse. The cost of future premiums are computed using the premium inflation rates input on the economic assumptions page. This annual compounded inflation rate is published at the top of the Present Value Computations report in the appendix.

For active members, the projected costs begin when the member reaches the assumed retirement age, and/or the year they meet the vesting requirement. For active employees who are past the assumed retirement age, they are considered to be retired in the next year or the year in which they meet the plan's vesting requirement whichever is later. If the plan has a limit on the number of years a member will receive benefits after retirement the benefits will stop at the age when benefits terminate as entered in the member records. The projection of benefits ends when a member's life expectancy ends.

Generally speaking, spousal eligibility, terms, and projections of benefits follow the corresponding members. It is assumed that spouses become eligible for benefits when the member retires unless the plan has a minimum age requirement for spouses in which case spousal benefits may be deferred. When the member reaches his/her life expectancy the spousal benefits continue to be projected by their own life expectancy estimate unless the "Benefits Terminate" item is checked as True on the spouse's member record.

**Calculation of Projected Cost of Benefits**

The next 55 years of benefits are summed to calculate the total for future benefits. The total present value of future benefits is calculated using each year's estimated annual premium discounted by the discount rate entered on the economic assumption page. The discount rate is checked for reasonableness by AFS Associates, Inc.

**Calculation of Normal Cost at Current Age and Actuarial Accrued Liability (AAL)**

The present value of the future benefits for each member and spouse is then multiplied by the probability of the member remaining employed from current age until assumed retirement age and the probability of remaining employed from entry age until retirement age. These factors are from the table in GASB's Guide to Implementation of GASB Statements 43 and 45 on Other Post Employment Benefits . The resulting amounts are the present values adjusted for the probability of being paid from current age to retirement age and from entry age to retirement age.

The entry age present value adjusted for the probability of being paid is then divided by the PV factor of $1 per year from entry age to retirement age. The result is the normal cost at entry age. The normal cost at entry age is then inflated using the salary increase rate as the inflation factor for the number of years of employment to obtain the normal cost at current age for each member and spouse. The sum of these is the normal cost at current age for the plan.

The present value factor of $1 per year from current age to assumed retirement age is then multiplied by the normal cost at current age to obtain the present value of future normal cost.

The present value of future normal costs is then subtracted from the current-age probability-adjusted present value of total benefits to be paid. The resulting amount is the actuarial accrued liability (AAL) for each member and spouse. The sum of all individual AAL's is the AAL for the plan.

Calculation of the Amortization of UAAL

The current value of assets held by the plan is then subtracted from the AAL to determine the unfunded actuarial accrued liability (UAAL). This amount is then divided by the amortization present value factor based on a 30 year amortization period. The result is the amortization payment that would have been due at the beginning of the year. Interest for one year is then calculated using the discount rate. The sum of the amortization payment plus the interest on that amount for the current year is the total amortization amount for the current year.

Calculation of ARC and the Annual OPEB Expense

The total normal cost is then added to the total amortization payment to obtain the annual required contribution (ARC). The interest on the beginning of the year net OPEB obligation, if any, is calculated to be added to the ARC. An ARC adjustment is then calculated to be subtracted from the ARC. The resulting number is the annual OPEB expense.

Any active employee contributions for their future retiree healthcare are then subtracted from the OPEB expense to determine the employer portion of the annual OPEB expense. The annual employer contribution (or amount paid for benefits if a pay-as-you-go funding method is used) is then subtracted from the employer portion of the annual OPEB expense to determine the net change in the OPEB obligation. The Net Change in OPEB Obligation is then added to the Net OPEB Obligation at the beginning of the year to determine the Net OPEB obligation at the end of the year.

**Present Value Computations**
**Little Compton Public Safety**
**For Fiscal Year 2013**

| ID / Year | Employment Status | Gender | Years Employed | Retirement Age | Age | Years of Benefit | Premium | Medicare Premium | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | 103.00% | 106.09% | 109.27% | 112.55% | 115.93% | 119.41% | 122.99% | 126.68% | 130.48% | 134.39% |
| 10055 | Active | M | 23 | 54 | 46 | 19 | 23338 | 1 | | | | | | | | | $30,451 | $31,364 |
| 10068 | Retired | M | 24 | 50 | 59 | 6 | 21899 | 1 | $22,556 | $23,233 | $23,929 | $24,647 | $25,388 | $26,150 | $1 | | | |
| 10064 | Retired | M | 6 | 47 | 63 | 2 | 21899 | 1 | $22,556 | $23,233 | $1 | | | | | | | |
| 10066 | Retired | M | 25 | 50 | 60 | 5 | 21899 | 1 | $22,556 | $23,233 | $23,929 | $24,647 | $25,388 | $1 | | | | |
| 10069 | Retired | M | 25 | 45 | 45 | 20 | 21899 | 1 | $22,556 | $23,233 | $23,929 | $24,647 | $25,388 | $26,150 | $26,934 | $27,742 | $28,574 | $29,430 |
| 10062 | Active | M | 26 | 54 | 52 | 13 | 22816 | 1 | | | $24,931 | $25,679 | $26,451 | $27,245 | $28,061 | $28,903 | $29,770 | $30,662 |
| 10067 | Retired | M | 20 | 56 | 59 | 6 | 21899 | 1 | $22,556 | $23,233 | $23,929 | $24,647 | $25,388 | $26,150 | $1 | | | |
| 10065 | Retired | M | 26 | 56 | 57 | 8 | 21899 | 1 | $22,556 | $23,233 | $23,929 | $24,647 | $25,388 | $26,150 | $26,934 | $27,742 | $1 | |
| 10056 | Active | M | 17 | 54 | 37 | 28 | 23338 | 1 | | | | | | | | | | |
| 10057 | Active | M | 8 | 54 | 46 | 19 | 10048 | 1 | | | | | | | | | $13,111 | $13,504 |
| 10070 | Retired | M | 28 | 49 | 61 | 4 | 21899 | 1 | $22,556 | $23,233 | $23,929 | $24,647 | $1 | | | | | |
| 10058 | Active | M | 8 | 54 | 52 | 13 | 23338 | 1 | | | $25,501 | $26,267 | $27,056 | $27,868 | $28,703 | $29,565 | $30,451 | $31,364 |
| 10059 | Active | M | 15 | 54 | 47 | 18 | 23338 | 1 | | | | | | | | $29,565 | $30,451 | $31,364 |
| 10060 | Active | M | 25 | 54 | 54 | 11 | 23338 | 1 | $24,038 | $24,759 | $25,501 | $26,267 | $27,056 | $27,868 | $28,703 | $29,565 | $30,451 | $31,364 |
| 10063 | Active | M | 24 | 54 | 44 | 21 | 22816 | 1 | | | | | | | | | | |
| 10061 | Active | M | 2 | 54 | 23 | 42 | 10048 | 1 | | | | | | | | | | |

**Present Value Computations**
**Little Compton Public Safety**
**For Fiscal Year 2013**

| ID / Year | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 138.42% | 142.58% | 146.85% | 151.26% | 155.80% | 160.47% | 165.28% | 170.24% | 175.35% | 180.61% | 186.03% | 191.61% | 197.36% | 203.28% | 209.38% | 215.66% | 222.13% | 228.79% |
| 10055 | $32,304 | $33,275 | $34,272 | $35,301 | $36,361 | $37,450 | $38,573 | $39,731 | $40,923 | $2 | | | | | | | | |
| 10068 | | | | | | | | | | | | | | | | | | |
| 10064 | | | | | | | | | | | | | | | | | | |
| 10066 | | | | | | | | | | | | | | | | | | |
| 10069 | $30,313 | $31,224 | $32,159 | $33,124 | $34,119 | $35,141 | $36,195 | $37,281 | $38,400 | $39,552 | $2 | | | | | | | |
| 10062 | $31,582 | $32,531 | $33,505 | $2 | | | | | | | | | | | | | | |
| 10067 | | | | | | | | | | | | | | | | | | |
| 10065 | | | | | | | | | | | | | | | | | | |
| 10056 | | | | | | | | $39,731 | $40,923 | $42,151 | $43,416 | $44,718 | $46,060 | $47,441 | $48,865 | $50,331 | $51,841 | $53,395 |
| 10057 | $13,908 | $14,326 | $14,755 | $15,199 | $15,655 | $16,124 | $16,607 | $17,106 | $17,619 | $2 | | | | | | | | |
| 10070 | | | | | | | | | | | | | | | | | | |
| 10058 | $32,304 | $33,275 | $34,272 | $2 | | | | | | | | | | | | | | |
| 10059 | $32,304 | $33,275 | $34,272 | $35,301 | $36,361 | $37,450 | $38,573 | $39,731 | $2 | | | | | | | | | |
| 10060 | $32,304 | $1 | | | | | | | | | | | | | | | | |
| 10063 | $31,582 | $32,531 | $33,505 | $34,511 | $35,547 | $36,613 | $37,710 | $38,842 | $40,008 | $41,208 | $42,445 | $2 | | | | | | |
| 10061 | | | | | | | | | | | | | | | | | | |

**Present Value Computations**
**Little Compton Public Safety**
**For Fiscal Year 2013**

| ID / Year | 2041 | 2042 | 2043 | 2044 | 2045 | 2046 | 2047 | 2048 | 2049 | 2050 | 2051 | 2052 | 2053 | 2054 | 2055 | 2056 | 2057 | 2058 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 235.66% | 242.73% | 250.01% | 257.51% | 265.23% | 273.19% | 281.39% | 289.83% | 298.52% | 307.48% | 316.70% | 326.20% | 335.99% | 346.07% | 356.45% | 367.15% | 378.16% | 389.50% |
| 10055 | | | | | | | | | | | | | | | | | | |
| 10068 | | | | | | | | | | | | | | | | | | |
| 10064 | | | | | | | | | | | | | | | | | | |
| 10066 | | | | | | | | | | | | | | | | | | |
| 10069 | | | | | | | | | | | | | | | | | | |
| 10062 | | | | | | | | | | | | | | | | | | |
| 10067 | | | | | | | | | | | | | | | | | | |
| 10065 | | | | | | | | | | | | | | | | | | |
| 10056 | $2 | | | | | | | | | | | | | | | | | |
| 10057 | | | | | | | | | | | | | | | | | | |
| 10070 | | | | | | | | | | | | | | | | | | |
| 10058 | | | | | | | | | | | | | | | | | | |
| 10059 | | | | | | | | | | | | | | | | | | |
| 10060 | | | | | | | | | | | | | | | | | | |
| 10063 | | | | | | | | | | | | | | | | | | |
| 10061 | | | | $25,875 | $26,650 | $27,450 | $28,274 | $29,122 | $29,995 | $30,896 | $31,822 | $32,777 | $33,760 | $34,773 | $4 | | | |

**Present Value Computations**
**Little Compton Public Safety**
**For Fiscal Year 2013**

| ID / Year | 2059 | 2060 | 2061 | 2062 | 2063 | 2064 | 2065 | 2066 | 2067 | 2068 | 2069 | 2070 | 2071 | 2072 | Total | Present Value of Benefits |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 401.19% | 413.23% | 425.62% | 438.39% | 451.54% | 465.09% | 479.04% | 493.41% | 508.21% | 523.46% | 539.17% | 555.34% | 572.00% | 589.16% | | |
| 10055 | | | | | | | | | | | | | | | $390,007 | $224,343 |
| 10068 | | | | | | | | | | | | | | | $145,904 | $127,044 |
| 10064 | | | | | | | | | | | | | | | $45,790 | $43,170 |
| 10066 | | | | | | | | | | | | | | | $119,754 | $106,378 |
| 10069 | | | | | | | | | | | | | | | $606,093 | $396,345 |
| 10062 | | | | | | | | | | | | | | | $319,322 | $232,418 |
| 10067 | | | | | | | | | | | | | | | $145,904 | $127,044 |
| 10065 | | | | | | | | | | | | | | | $200,580 | $167,783 |
| 10056 | | | | | | | | | | | | | | | $508,874 | $205,660 |
| 10057 | | | | | | | | | | | | | | | $167,916 | $96,590 |
| 10070 | | | | | | | | | | | | | | | $94,366 | $85,511 |
| 10058 | | | | | | | | | | | | | | | $326,628 | $237,735 |
| 10059 | | | | | | | | | | | | | | | $378,649 | $226,522 |
| 10060 | | | | | | | | | | | | | | | $307,877 | $242,373 |
| 10063 | | | | | | | | | | | | | | | $404,504 | $215,128 |
| 10061 | | | | | | | | | | | | | | | $331,398 | $77,343 |

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## ARC using the Entry Age Cost Method
## Little Compton Public Safety
## For the Fiscal Year 2013

| Employee ID | Status | Entry Age | Employee Age | Assumed Retirement Age | Years of Past Service | Present Value of Total Benefits | Probability of remaining employed Current Age to Retirement | Probability of remaining employed Entry Age to Retirement | Present Value adjusted for probability of being paid | Entry Age Probability-Adjusted | PV factor of $1 per year from Entry age to Ret Age | Normal Cost at Entry Age | Normal Cost at Current Age | PV factor of $1 per year from current age to retirement | PV of future normal cost | AAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10055 | Active | 23 | 46 | 54 | 23 | $224,343 | 0.943 | 0.379 | $211,555 | $34,497 | 14.6200 | $2,360 | $3,721 | 7.4818 | $27,840 | $183,715 |
| 10068 | Retired | 26 | 59 | 50 | 24 | $127,044 | 1 | 0.472 | $127,044 | $23,394 | 0 | 0 | 0 | 0.0000 | 0 | $127,044 |
| 10064 | Retired | 41 | 63 | 47 | 6 | $43,170 | 1 | 0.86 | $43,170 | $29,341 | 0 | 0 | 0 | 0.0000 | 0 | $43,170 |
| 10066 | Retired | 25 | 60 | 50 | 25 | $106,378 | 1 | 0.44 | $106,378 | $17,558 | 0 | 0 | 0 | 0.0000 | 0 | $106,378 |
| 10069 | Retired | 20 | 45 | 45 | 25 | $396,345 | 0.928 | 0.296 | $367,808 | $44,008 | 0 | 0 | 0 | 0.0000 | 0 | $396,345 |
| 10062 | Active | 26 | 52 | 54 | 26 | $232,418 | 1 | 0.472 | $232,418 | $39,568 | 14.6200 | $2,706 | $4,528 | 1.9808 | $8,969 | $223,449 |
| 10067 | Retired | 36 | 59 | 56 | 20 | $127,044 | 1 | 0.753 | $127,044 | $43,660 | 0 | 0 | 0 | 0.0000 | 0 | $127,044 |
| 10065 | Retired | 30 | 57 | 56 | 26 | $167,783 | 1 | 0.593 | $167,783 | $35,887 | 0 | 0 | 0 | 0.0000 | 0 | $167,783 |
| 10056 | Active | 20 | 37 | 54 | 17 | $205,660 | 0.777 | 0.296 | $159,798 | $31,252 | 13.8870 | $2,250 | $3,151 | 13.1397 | $41,403 | $118,395 |
| 10057 | Active | 38 | 46 | 54 | 8 | $96,590 | 0.943 | 0.799 | $91,084 | $56,391 | 12.3778 | $4,556 | $5,338 | 7.4818 | $39,938 | $51,146 |
| 10070 | Retired | 21 | 61 | 49 | 28 | $85,511 | 1 | 0.321 | $85,511 | $9,154 | 0 | 0 | 0 | 0.0000 | 0 | $85,511 |
| 10058 | Active | 44 | 52 | 54 | 8 | $237,735 | 1 | 0.912 | $237,735 | $158,424 | 8.3379 | $19,000 | $22,262 | 1.9808 | $44,097 | $193,638 |
| 10059 | Active | 32 | 47 | 54 | 15 | $226,522 | 0.958 | 0.65 | $217,008 | $81,757 | 14.6200 | $5,592 | $7,526 | 6.6089 | $49,739 | $167,269 |
| 10060 | Active | 29 | 54 | 54 | 25 | $242,373 | 1 | 0.564 | $242,373 | $51,278 | 14.6200 | $3,507 | $5,754 | 0.0000 | 0 | $242,373 |
| 10063 | Active | 20 | 44 | 54 | 24 | $215,128 | 0.912 | 0.296 | $196,197 | $24,842 | 13.8870 | $1,789 | $2,877 | 8.3379 | $23,988 | $172,209 |
| 10061 | Active | 21 | 23 | 54 | 2 | $77,343 | 0.379 | 0.321 | $29,313 | $22,954 | 13.8870 | $1,653 | $1,720 | 14.6200 | $25,146 | $4,167 |
| | | | | | | | | | | | | | $56,877 | | | $2,409,636 |

# FINAL

# ACOPEB

## Report on the OPEB Costs and Liability

## Little Compton School Certified

## For the Year Ending June 30, 2013

## 11/14/2013

## Table of Contents



**Appendices:**

## Description of Report

This report was prepared using ACOPEB.com software to satisfy the requirements of Government Accounting Standards Board Statement No. 45 (GASB 45). This Statement requires that the annual cost and liability associated with other post employment benefits (OPEB) be computed and gradually brought onto the governments' books. If the Little Compton, RI Schools Certified is using this report to comply with GASB 45, then the Little Compton, RI Schools Certified has under 100 participants covered under the plan and is eligible for the alternative measurement method.

This report provides four primary results: the Actuarial Accrued Liability (AAL), the Unfunded Actuarial Accrued Liability (UAAL), the Annual Required Contribution (ARC), and the Net OPEB Obligation.

**The Actuarial Accrued Liability (AAL)** is the total projected liability for the post employment benefits covered under the plan. The AAL calculation uses the data on active employees, employees who have left employment but who are eligible for retiree healthcare, current retirees and their beneficiaries, and spouses who are eligible for the retiree healthcare benefit provided by the Little Compton, RI Schools Certified. This information along with a set of economic assumptions (see page 8) is used to project the cost of these future benefits and then do an actuarial analysis on the future cost of the benefits to arrive at the AAL. These computations can be found in the appendix.

**Unfunded Actuarial Accrued Liability (UAAL)** is the AAL less the value of plan assets. Any plan assets used to reduce AAL will have been reported in a fiduciary fund on the fund financial statements.

**Annual Required Contribution (ARC)** is the current amortization of the UAAL and the normal costs that need to be reported in the basic financial statements.

**Net OPEB Obligation** is the ARC less certain contributions that can be counted as payment toward the ARC plus any prior year OPEB obligations.

For financial statement purposes, GASB 45 impacts the government-wide and/or the proprietary fund statements but does not affect the governmental fund financial statements. The ARC and Net OPEB Obligation will be among the adjusting entries made to convert the governmental funds from the modified accrual basis to the full accrual basis. The ARC amount will be expensed on the government-wide statement of activities. The Net OPEB Obligation amount will be reported as a liability on the government-wide statement of net assets. For proprietary funds, the impact of GASB 45 affects the fund financial statements, with the Net OPEB Obligation being reported as a liability and the ARC as an expense.

Additional note disclosures and required supplementary information (RSI) are required as a result of GASB 45. The portion of this disclosure related specifically to the computations has been provided on page 5.

# Results of the ACOPEB Calculation

| | | |
|---|---|---|
| Normal cost (current service cost) | $ | 20,112 |
| Amortization of UAAL (for past service) | | 16,625 |
| **Annual Required Contribution (ARC)** | | 36,737 |
| Interest on beginning net OPEB obligation | | 5,727 |
| ARC adjustment | | (6,486) |
| **Annual OPEB expense** | | 35,978 |
| Actual active employee matching contributions | | 0 |
| **Employer Portion of Annual OPEB expense** | | 35,978 |
| Actual current year employer contribution and/or payment | | 26,324 |
| Increase in OPEB obligation | | 9,654 |
| **Net OPEB obligation at beginning of year** | | 143,182 |
| **Net OPEB obligation at end of year** | | 152,836 |

| | | |
|---|---|---|
| Covered payroll | 1,747,359 | |
| Annual OPEB expense as a % of covered payroll | 2.10 | % |

## Source for Government-Wide Adjustments

| | |
|---|---|
| OPEB Expense presented in Government-wide Statement of Activities | **35,978** |
| Liability on the Government-wide Statement of Net Assets | **152,836** |

# OPEB Information for Note Disclosure and Required Supplementary Information

| | | Current Calculation |
|---|---|---|
| Actuarial accrued liabilities (AAL) | $ | 367,016 |
| Actuarial value of plan assets | | 0 |
| Unfunded actuarial accrued liabilities (UAAL) | | 367,016 |
| Funded Ratio | | 0 % |
| | | |
| Covered Payroll | $ | 1,747,359 |
| UAAL as % of Covered Payroll | | 21.00 % |

# Calculation of the Amortization of UAAL

| Amortization Component | |
|---|---|
| AAL | 367,016 |
| Less: Assets | 0 |
| UAAL | 367,016 |
| Divided by PV factor | 22.9592 |
| Amortization Payment | 15,986 |
| Current year interest | 639 |
| Total Amortization Payment | 16,625 |

## How the Results Affect Your Annual Financial Report

This report provides your organization's annual OPEB expense amount and the net OPEB obligation at the end of the year both of which will be reported in your financial statements. Additionally, the portion of the required note disclosure related specifically to the computations has been provided on page 5.

This report presents the ARC and net OPEB obligation as a total for the entire plan. In many cases it will be necessary to allocate the OPEB expense and net OPEB obligation between governmental and proprietary funds and/or to different programs within the government. When preparing the relative percentages to allocate these amounts, it is important to note that the retired members will not be represented in any current year FTE or payroll statistics. As a result, it may be most accurate when creating the relative percentages to use the plan data provided in this report, and then to determine where the retired members (including associated spouses) worked when creating the relative percentages.

**Applying the OPEB expense and Net OPEB Obligation Amount to your financial statements.**

If your organization only has governmental funds, the OPEB expense and net OPEB obligation are reported only on the government-wide financial statements.

If your organization has proprietary funds, the portion of the OPEB expense and the net OPEB obligation attributable to each proprietary fund is reported in the proprietary fund financial statements and on the government-wide financial statements.

# Report Assumptions

| | |
|---|---|
| Assumed retirement age | 62 |
| Discount rate | 4% |
| Average salary increase | 2% |
| Medical insurance premium increases (for both active and retired participants) | |
| Year 1 | 3% |
| Year 2 | 3% |
| Year 3 | 3% |
| Year 4 | 3% |
| Year 5 | 3% |
| Year 6 | 3% |
| Years 7-10 | 3% |
| Years 11-21 | 3% |
| Years 21 on | 3% |

Note: The medical insurance premium increases should be reasonably comparable with those found in the *National Health Care Expenditures Projections* of the Office of the actuary at the Centers for Medicare and Medicaid Services in 2007.

The probability of remaining employed until retirement age from current and entry age by age comes from the Table 1 in GASB Statement 45.

Life expectancy by gender comes from the *Life Expectancy Table* from National Center for Health Statistics updated in 2008.

## Disclaimer

The Little Compton, RI Schools Certified provided all the information entered into ACOPEB.com necessary for the successful completion of the work. The Little Compton, RI Schools Certified attests that the data provided is accurate, reflects reasonable assumptions, and is consistent with that required for calculation of OPEB costs and obligations. The Little Compton, RI Schools Certified attests that the accuracy of the OPEB calculations is dependent on the accuracy of the data and holds harmless AFS Associates, Inc. from any misstatement of the Government's data.

AFS Associates, Inc provided the software to prepare this report on OPEB costs and obligations to meet the requirements of the alternative measurement methodology of GASB 45. However, AFS Associates, Inc. has not audited the data provided by the Little Compton, RI Schools Certified and accordingly does not express an opinion on the quality or accuracy of the Government's data and is held harmless for the effects of any errors or misstatement of the results caused by inaccurate data or assumptions.

# APPENDIX

**Methodology** – A detailed description of how the calculations are done.

**Present Value Computation** – The columns in the table shows the calculation of the future benefits for each plan member for each future year. The individual year present values are calculated and then totaled to arrive at a total present value of future benefits for each plan member.

**ARC and AAL Using the Entry Age Actuarial Cost Method** – Shows the calculation of the normal cost at current age and the actuarial accrued liability (AAL) using the present value of future benefits for individual plan members from the previous table.

# Methodology

The methodology used for calculating the normal the annual required contribution and the actuarial accrued liability follows the process used in the example found in GASB Statement 45. However, ACOPEB.com uses only the entry age actuarial cost method (also called entry age normal actuarial cost method) of calculation and the level percent of payroll option. This is the methodology AFS Associates, Inc. believes is used by the majority of pension and OPEB plans.

ACOPEB.com uses the data entered as economic assumptions and member data to calculate the actuarial present value of future benefits for each individual. This projection uses the assumed retirement age for members of the plan and the employer's portion of health insurance premiums for current retirees and spouses as a statistical base to forecast the cost of future benefits. The projections differentiate between members who are Medicare eligible and those who are not. Premiums are inflated using future insurance premium increase assumptions. The life expectancy and thus the number of years benefits are projected to be received, is estimated based on the Expectation of Life by Age and Sex in the U.S. table prepared by the National Center for Health Statistics and updated in 2008. The assumed retirement age for active members and their spouses is adjusted to reflect any eligibility requirement, such as a vesting period, by entering an eligible retirement age in the member data for each active member. (For example, an active member is 62 years of age and has 3 years of service and the plan has an assumed retirement age of 65 with a vesting requirement of 10 years. For this member, the age entered in the eligibility requirements is 72 years of age. Benefits will begin at age 72 rather than the assumed retirement age of 65.) The benefits will begin at the eligible retirement age if greater than the assumed retirement age. If there is a minimum age requirement for spouses this will adjust when benefits start being received.

Unidentified former members who may be eligible for benefits are not included in the calculations. Children of active members are not considered in the calculations. Children of retirees receiving benefits are included as additional retired members in the member records. They are included for benefits until they reach the age when benefits terminate, as dictated by the plan.

The current annual premium for an active member represents what the plan is now paying for a retiree member or their spouse. For a retired member the current annual premium is the actual amount the plan paid for that member. As a result, the premiums entered for an active employee and spouse will be very similar, if not the same, as existing retired members and spouses.

A second premium amount is entered for when a member becomes eligible for Medicare. The Medicare premium for each member in the member records should be the amount of annual premiums covered by the plan which could include both the medicare premium and supplemental insurance premiums. The premiums are entered for each member in the member records. If a member is not eligible for Medicare, the Medicare premium value would be 0.

If the assumed retirement age is at or above that necessary to be eligible for Medicare, then the amount entered for both premiums would be the annual Medicare eligible premium. If the assumed retirement age is below the Medicare eligible age, the premium would be based on what the plan is now paying for retired members who are not Medicare eligible.

The annual premium is projected into the future for each member and their spouse. The cost of future premiums are computed using the premium inflation rates input on the economic assumptions page. This annual compounded inflation rate is published at the top of the Present Value Computations report in the appendix.

For active members, the projected costs begin when the member reaches the assumed retirement age, and/or the year they meet the vesting requirement. For active employees who are past the assumed retirement age, they are considered to be retired in the next year or the year in which they meet the plan's vesting requirement whichever is later. If the plan has a limit on the number of years a member will receive benefits after retirement the benefits will stop at the age when benefits terminate as entered in the member records. The projection of benefits ends when a member's life expectancy ends.

Generally speaking, spousal eligibility, terms, and projections of benefits follow the corresponding members. It is assumed that spouses become eligible for benefits when the member retires unless the plan has a minimum age requirement for spouses in which case spousal benefits may be deferred. When the member reaches his/her life expectancy the spousal benefits continue to be projected by their own life expectancy estimate unless the "Benefits Terminate" item is checked as True on the spouse's member record.

**Calculation of Projected Cost of Benefits**

The next 55 years of benefits are summed to calculate the total for future benefits. The total present value of future benefits is calculated using each year's estimated annual premium discounted by the discount rate entered on the economic assumption page. The discount rate is checked for reasonableness by AFS Associates, Inc.

**Calculation of Normal Cost at Current Age and Actuarial Accrued Liability (AAL)**

The present value of the future benefits for each member and spouse is then multiplied by the probability of the member remaining employed from current age until assumed retirement age and the probability of remaining employed from entry age until retirement age. These factors are from the table in GASB's Guide to Implementation of GASB Statements 43 and 45 on Other Post Employment Benefits . The resulting amounts are the present values adjusted for the probability of being paid from current age to retirement age and from entry age to retirement age.

The entry age present value adjusted for the probability of being paid is then divided by the PV factor of $1 per year from entry age to retirement age. The result is the normal cost at entry age. The normal cost at entry age is then inflated using the salary increase rate as the inflation factor for the number of years of employment to obtain the normal cost at current age for each member and spouse. The sum of these is the normal cost at current age for the plan.

The present value factor of $1 per year from current age to assumed retirement age is then multiplied by the normal cost at current age to obtain the present value of future normal cost.

The present value of future normal costs is then subtracted from the current-age probability-adjusted present value of total benefits to be paid. The resulting amount is the actuarial accrued liability (AAL) for each member and spouse. The sum of all individual AAL's is the AAL for the plan.

Calculation of the Amortization of UAAL

The current value of assets held by the plan is then subtracted from the AAL to determine the unfunded actuarial accrued liability (UAAL). This amount is then divided by the amortization present value factor based on a 30 year amortization period. The result is the amortization payment that would have been due at the beginning of the year. Interest for one year is then calculated using the discount rate. The sum of the amortization payment plus the interest on that amount for the current year is the total amortization amount for the current year.

Calculation of ARC and the Annual OPEB Expense

The total normal cost is then added to the total amortization payment to obtain the annual required contribution (ARC). The interest on the beginning of the year net OPEB obligation, if any, is calculated to be added to the ARC. An ARC adjustment is then calculated to be subtracted from the ARC. The resulting number is the annual OPEB expense.

Any active employee contributions for their future retiree healthcare are then subtracted from the OPEB expense to determine the employer portion of the annual OPEB expense. The annual employer contribution (or amount paid for benefits if a pay-as-you-go funding method is used) is then subtracted from the employer portion of the annual OPEB expense to determine the net change in the OPEB obligation. The Net Change in OPEB Obligation is then added to the Net OPEB Obligation at the beginning of the year to determine the Net OPEB obligation at the end of the year.

**Present Value Computations**
**Little Compton, RI Schools Certified**
**For Fiscal Year 2013**

| ID / Year | Employment Status | Gender | Years Employed | Retirement Age | Age | Years of Benefit | Premium | Medicare Premium | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | 103.00% | 106.09% | 109.27% | 112.55% | 115.93% | 119.41% | 122.99% | 126.68% | 130.48% | 134.39% |
| 10072 | Active | F | 36 | 62 | 66 | 1 | 268 | 1 | $276 | $1 | | | | | | | | |
| 10073 | Active | F | 19 | 62 | 55 | 12 | 5501 | 1 | | | | | | | | $6,969 | $7,178 | $7,393 |
| 10071 | Active | F | 14 | 62 | 49 | 18 | 5501 | 1 | | | | | | | | | | |
| 10079 | Active | F | 3 | 62 | 32 | 35 | 5501 | 1 | | | | | | | | | | |
| 10074 | Active | F | 4 | 62 | 58 | 9 | 5501 | 1 | | | | | $6,377 | $6,569 | $6,766 | $6,969 | $7,178 | $1 |
| 10075 | Active | F | 15 | 62 | 54 | 13 | 5501 | 1 | | | | | | | | | $7,178 | $7,393 |
| 10095 | Active | F | 8 | 62 | 30 | 37 | 2152 | 1 | | | | | | | | | | |
| 10076 | Active | F | 25 | 62 | 60 | 7 | 268 | 1 | | | $293 | $302 | $311 | $320 | $330 | $1 | | |
| 10077 | Active | M | 16 | 62 | 42 | 25 | 5501 | 1 | | | | | | | | | | |
| 10078 | Active | F | 12 | 62 | 56 | 11 | 5501 | 1 | | | | | | | $6,766 | $6,969 | $7,178 | $7,393 |
| 10100 | Retired | F | 25 | 64 | 65 | 4 | 5501 | 1 | $5,666 | $5,836 | $1 | $1 | $1 | | | | | |
| 10083 | Active | F | 4 | 62 | 26 | 41 | 2152 | 1 | | | | | | | | | | |
| 10080 | Active | F | 4 | 62 | 28 | 39 | 2152 | 1 | | | | | | | | | | |
| 10081 | Active | F | 15 | 62 | 46 | 21 | 5501 | 1 | | | | | | | | | | |
| 10082 | Active | F | 4 | 62 | 47 | 20 | 5501 | 1 | | | | | | | | | | |
| 10084 | Active | F | 11 | 62 | 35 | 32 | 5501 | 1 | | | | | | | | | | |
| 10085 | Active | F | 18 | 62 | 43 | 24 | 5966 | 1 | | | | | | | | | | |
| 10086 | Active | F | 27 | 62 | 59 | 8 | 5501 | 1 | | | | $6,191 | $6,377 | $6,569 | $6,766 | $6,969 | $1 | |
| 10102 | Retired | M | 39 | 56 | 61 | 19.68 | 2152 | 1 | $2,217 | $2,283 | $2,351 | $2,422 | $2,495 | $2,570 | $1 | $1 | $1 | $1 |
| 10101 | Retired | F | 38 | 59 | 62 | 2 | 2152 | 1 | $2,217 | $2,283 | $2,351 | | | | | | | |
| 10087 | Active | F | 17 | 62 | 41 | 26 | 5501 | 1 | | | | | | | | | | |
| 10088 | Active | F | 14 | 62 | 60 | 7 | 5501 | 1 | | | $6,011 | $6,191 | $6,377 | $6,569 | $6,766 | $1 | | |
| 10089 | Active | F | 4 | 62 | 32 | 35 | 5501 | 1 | | | | | | | | | | |
| 10103 | Retired | M | 36 | 57 | 58 | 4 | 5501 | 1 | $5,666 | $5,836 | $6,011 | $6,191 | $6,377 | | | | | |
| 10090 | Active | M | 7 | 62 | 66 | 1 | 5501 | 1 | $5,666 | $1 | | | | | | | | |
| 10091 | Active | F | 15 | 62 | 53 | 14 | 5501 | 1 | | | | | | | | | | $7,393 |
| 10092 | Active | F | 10 | 62 | 35 | 32 | 5501 | 1 | | | | | | | | | | |
| 10093 | Active | F | 4 | 62 | 31 | 36 | 2152 | 1 | | | | | | | | | | |
| 10094 | Active | F | 5 | 62 | 33 | 34 | 5501 | 1 | | | | | | | | | | |
| 10096 | Active | M | 5 | 62 | 36 | 31 | 5501 | 1 | | | | | | | | | | |
| 10104 | Retired | F | 34 | 57 | 60 | 2 | 5501 | 1 | $5,666 | $5,836 | $6,011 | | | | | | | |
| 10097 | Active | F | 11 | 62 | 52 | 15 | 5501 | 1 | | | | | | | | | | |
| 10098 | Active | F | 31 | 62 | 65 | 2 | 2152 | 1 | $2,217 | $2,283 | $1 | | | | | | | |
| 10099 | Active | M | 25 | 62 | 58 | 9 | 5966 | 1 | | | | | $6,916 | $7,124 | $7,338 | $7,558 | $7,784 | $1 |

**Present Value Computations**
**Little Compton, RI Schools Certified**
**For Fiscal Year 2013**

| ID / Year | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 138.42% | 142.58% | 146.85% | 151.26% | 155.80% | 160.47% | 165.28% | 170.24% | 175.35% | 180.61% | 186.03% | 191.61% | 197.36% | 203.28% | 209.38% | 215.66% | 222.13% | 228.79% |
| 10072 | | | | | | | | | | | | | | | | | | |
| 10073 | $7,614 | $7,843 | $1 | | | | | | | | | | | | | | | |
| 10071 | | | | $8,321 | $8,571 | $8,827 | $9,092 | $9,365 | $2 | | | | | | | | | |
| 10079 | | | | | | | | | | | | | | | | | | |
| 10074 | | | | | | | | | | | | | | | | | | |
| 10075 | $7,614 | $7,843 | $8,078 | $2 | | | | | | | | | | | | | | |
| 10095 | | | | | | | | | | | | | | | | | | |
| 10076 | | | | | | | | | | | | | | | | | | |
| 10077 | | | | | | | | | | | $10,234 | $10,540 | $10,857 | $11,182 | $11,518 | $2 | | |
| 10078 | $7,614 | $1 | | | | | | | | | | | | | | | | |
| 10100 | | | | | | | | | | | | | | | | | | |
| 10083 | | | | | | | | | | | | | | | | | | |
| 10080 | | | | | | | | | | | | | | | | | | |
| 10081 | | | | | | | $9,092 | $9,365 | $9,646 | $9,935 | $10,234 | $2 | | | | | | |
| 10082 | | | | | | $8,827 | $9,092 | $9,365 | $9,646 | $9,935 | $2 | | | | | | | |
| 10084 | | | | | | | | | | | | | | | | | | $12,586 |
| 10085 | | | | | | | | | | $10,775 | $11,099 | $11,431 | $11,774 | $12,128 | $2 | | | |
| 10086 | | | | | | | | | | | | | | | | | | |
| 10102 | $1 | $1 | $1 | $2 | $2 | $2 | $2 | $2 | $2 | $2 | $2 | | | | | | | |
| 10101 | | | | | | | | | | | | | | | | | | |
| 10087 | | | | | | | | | | | | $10,540 | $10,857 | $11,182 | $11,518 | $11,863 | $2 | |
| 10088 | | | | | | | | | | | | | | | | | | |
| 10089 | | | | | | | | | | | | | | | | | | |
| 10103 | | | | | | | | | | | | | | | | | | |
| 10090 | | | | | | | | | | | | | | | | | | |
| 10091 | $7,614 | $7,843 | $8,078 | $8,321 | $2 | | | | | | | | | | | | | |
| 10092 | | | | | | | | | | | | | | | | | | $12,586 |
| 10093 | | | | | | | | | | | | | | | | | | |
| 10094 | | | | | | | | | | | | | | | | | | |
| 10096 | | | | | | | | | | | | | | | | | $12,219 | $12,586 |
| 10104 | | | | | | | | | | | | | | | | | | |
| 10097 | $7,614 | $7,843 | $8,078 | $8,321 | $8,571 | $2 | | | | | | | | | | | | |
| 10098 | | | | | | | | | | | | | | | | | | |
| 10099 | | | | | | | | | | | | | | | | | | |

**Present Value Computations**
**Little Compton, RI Schools Certified**
**For Fiscal Year 2013**

| ID / Year | 2041 | 2042 | 2043 | 2044 | 2045 | 2046 | 2047 | 2048 | 2049 | 2050 | 2051 | 2052 | 2053 | 2054 | 2055 | 2056 | 2057 | 2058 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 235.66% | 242.73% | 250.01% | 257.51% | 265.23% | 273.19% | 281.39% | 289.83% | 298.52% | 307.48% | 316.70% | 326.20% | 335.99% | 346.07% | 356.45% | 367.15% | 378.16% | 389.50% |
| 10072 | | | | | | | | | | | | | | | | | | |
| 10073 | | | | | | | | | | | | | | | | | | |
| 10071 | | | | | | | | | | | | | | | | | | |
| 10079 | | | $13,753 | $14,166 | $14,590 | $15,028 | $15,479 | $3 | | | | | | | | | | |
| 10074 | | | | | | | | | | | | | | | | | | |
| 10075 | | | | | | | | | | | | | | | | | | |
| 10095 | | | | | | $5,708 | $5,879 | $6,056 | $6,237 | $6,424 | $3 | | | | | | | |
| 10076 | | | | | | | | | | | | | | | | | | |
| 10077 | | | | | | | | | | | | | | | | | | |
| 10078 | | | | | | | | | | | | | | | | | | |
| 10100 | | | | | | | | | | | | | | | | | | |
| 10083 | | | | | | | | | $6,424 | $6,617 | $6,815 | $7,020 | $7,231 | $3 | | | | |
| 10080 | | | | | | | | $6,056 | $6,237 | $6,424 | $6,617 | $6,815 | $3 | | | | | |
| 10081 | | | | | | | | | | | | | | | | | | |
| 10082 | | | | | | | | | | | | | | | | | | |
| 10084 | $12,964 | $13,353 | $13,753 | $14,166 | $3 | | | | | | | | | | | | | |
| 10085 | | | | | | | | | | | | | | | | | | |
| 10086 | | | | | | | | | | | | | | | | | | |
| 10102 | | | | | | | | | | | | | | | | | | |
| 10101 | | | | | | | | | | | | | | | | | | |
| 10087 | | | | | | | | | | | | | | | | | | |
| 10088 | | | | | | | | | | | | | | | | | | |
| 10089 | | | $13,753 | $14,166 | $14,590 | $15,028 | $15,479 | $3 | | | | | | | | | | |
| 10103 | | | | | | | | | | | | | | | | | | |
| 10090 | | | | | | | | | | | | | | | | | | |
| 10091 | | | | | | | | | | | | | | | | | | |
| 10092 | $12,964 | $13,353 | $13,753 | $14,166 | $3 | | | | | | | | | | | | | |
| 10093 | | | | $5,542 | $5,708 | $5,879 | $6,056 | $6,237 | $3 | | | | | | | | | |
| 10094 | | $13,353 | $13,753 | $14,166 | $14,590 | $15,028 | $3 | | | | | | | | | | | |
| 10096 | $12,964 | $13,353 | $13,753 | $3 | | | | | | | | | | | | | | |
| 10104 | | | | | | | | | | | | | | | | | | |
| 10097 | | | | | | | | | | | | | | | | | | |
| 10098 | | | | | | | | | | | | | | | | | | |
| 10099 | | | | | | | | | | | | | | | | | | |

**Present Value Computations**
**Little Compton, RI Schools Certified**
**For Fiscal Year 2013**

| ID / Year | 2059 | 2060 | 2061 | 2062 | 2063 | 2064 | 2065 | 2066 | 2067 | 2068 | 2069 | 2070 | 2071 | 2072 | Total | Present Value of Benefits |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 401.19% | 413.23% | 425.62% | 438.39% | 451.54% | 465.09% | 479.04% | 493.41% | 508.21% | 523.46% | 539.17% | 555.34% | 572.00% | 589.16% | | |
| 10072 | | | | | | | | | | | | | | | $277 | $266 |
| 10073 | | | | | | | | | | | | | | | $36,998 | $24,975 |
| 10071 | | | | | | | | | | | | | | | $44,178 | $23,569 |
| 10079 | | | | | | | | | | | | | | | $73,019 | $19,998 |
| 10074 | | | | | | | | | | | | | | | $33,860 | $25,711 |
| 10075 | | | | | | | | | | | | | | | $38,108 | $24,735 |
| 10095 | | | | | | | | | | | | | | | $30,307 | $7,674 |
| 10076 | | | | | | | | | | | | | | | $1,557 | $1,279 |
| 10077 | | | | | | | | | | | | | | | $54,333 | $22,027 |
| 10078 | | | | | | | | | | | | | | | $35,921 | $25,218 |
| 10100 | | | | | | | | | | | | | | | $11,505 | $10,846 |
| 10083 | | | | | | | | | | | | | | | $34,110 | $7,383 |
| 10080 | | | | | | | | | | | | | | | $32,152 | $7,527 |
| 10081 | | | | | | | | | | | | | | | $48,274 | $22,895 |
| 10082 | | | | | | | | | | | | | | | $46,867 | $23,117 |
| 10084 | | | | | | | | | | | | | | | $66,825 | $20,587 |
| 10085 | | | | | | | | | | | | | | | $57,209 | $24,121 |
| 10086 | | | | | | | | | | | | | | | $32,873 | $25,960 |
| 10102 | | | | | | | | | | | | | | | $14,361 | $12,498 |
| 10101 | | | | | | | | | | | | | | | $6,851 | $6,333 |
| 10087 | | | | | | | | | | | | | | | $55,962 | $21,815 |
| 10088 | | | | | | | | | | | | | | | $31,915 | $26,211 |
| 10089 | | | | | | | | | | | | | | | $73,019 | $19,998 |
| 10103 | | | | | | | | | | | | | | | $30,081 | $26,721 |
| 10090 | | | | | | | | | | | | | | | $5,667 | $5,449 |
| 10091 | | | | | | | | | | | | | | | $39,251 | $24,497 |
| 10092 | | | | | | | | | | | | | | | $66,825 | $20,587 |
| 10093 | | | | | | | | | | | | | | | $29,425 | $7,749 |
| 10094 | | | | | | | | | | | | | | | $70,893 | $20,193 |
| 10096 | | | | | | | | | | | | | | | $64,878 | $20,787 |
| 10104 | | | | | | | | | | | | | | | $17,513 | $16,188 |
| 10097 | | | | | | | | | | | | | | | $40,429 | $24,261 |
| 10098 | | | | | | | | | | | | | | | $4,501 | $4,243 |
| 10099 | | | | | | | | | | | | | | | $36,721 | $27,883 |

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## ARC using the Entry Age Cost Method
## Little Compton, RI Schools Certified
## For the Fiscal Year 2013

| Employee ID | Status | Entry Age | Employee Age | Assumed Retirement Age | Years of Past Service | Present Value of Total Benefits | Probability of remaining employed Current Age to Retirement | Probability of remaining employed Entry Age to Retirement | Present Value adjusted for probability of being paid | Entry Age Probability-Adjusted | PV factor of $1 per year from Entry age to Ret Age | Normal Cost at Entry Age | Normal Cost at Current Age | PV factor of $1 per year from current age to retirement | PV of future normal cost | AAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10072 | Active | 30 | 66 | 62 | 36 | $266 | 1 | 0.593 | $266 | $38 | 18.0786 | $2 | $4 | 0.0000 | 0 | $266 |
| 10073 | Active | 36 | 55 | 62 | 19 | $24,975 | 1 | 0.753 | $24,975 | $8,926 | 17.4135 | $513 | $747 | 6.6089 | $4,937 | $20,038 |
| 10071 | Active | 35 | 49 | 62 | 14 | $23,569 | 0.986 | 0.729 | $23,239 | $9,922 | 17.4135 | $570 | $752 | 11.6009 | $8,724 | $14,515 |
| 10079 | Active | 29 | 32 | 62 | 3 | $19,998 | 0.65 | 0.564 | $12,999 | $10,027 | 18.0786 | $555 | $589 | 18.0786 | $10,648 | $2,351 |
| 10074 | Active | 54 | 58 | 62 | 4 | $25,711 | 1 | 1 | $25,711 | $21,978 | 7.4818 | $2,938 | $3,180 | 3.8861 | $12,358 | $13,353 |
| 10075 | Active | 39 | 54 | 62 | 15 | $24,735 | 1 | 0.821 | $24,735 | $11,276 | 16.7353 | $674 | $907 | 7.4818 | $6,786 | $17,949 |
| 10095 | Active | 22 | 30 | 62 | 8 | $7,674 | 0.593 | 0.349 | $4,551 | $1,957 | 16.0439 | $122 | $143 | 18.0786 | $2,585 | $1,966 |
| 10076 | Active | 35 | 60 | 62 | 25 | $1,279 | 1 | 0.729 | $1,279 | $350 | 17.4135 | $20 | $33 | 1.9808 | $65 | $1,214 |
| 10077 | Active | 26 | 42 | 62 | 16 | $22,027 | 0.879 | 0.472 | $19,362 | $5,551 | 17.4135 | $319 | $438 | 15.3388 | $6,718 | $12,644 |
| 10078 | Active | 44 | 56 | 62 | 12 | $25,218 | 1 | 0.912 | $25,218 | $14,365 | 14.6200 | $983 | $1,247 | 5.7188 | $7,131 | $18,087 |
| 10100 | Retired | 39 | 65 | 64 | 25 | $10,846 | 1 | 0.821 | $10,846 | $3,340 | 0 | 0 | 0 | 0.0000 | 0 | $10,846 |
| 10083 | Active | 22 | 26 | 62 | 4 | $7,383 | 0.472 | 0.349 | $3,485 | $2,203 | 16.0439 | $137 | $148 | 17.4135 | $2,577 | $908 |
| 10080 | Active | 24 | 28 | 62 | 4 | $7,527 | 0.534 | 0.41 | $4,019 | $2,638 | 16.7353 | $158 | $171 | 18.0786 | $3,091 | $928 |
| 10081 | Active | 31 | 46 | 62 | 15 | $22,895 | 0.943 | 0.622 | $21,590 | $7,907 | 18.0786 | $437 | $588 | 13.1397 | $7,726 | $13,864 |
| 10082 | Active | 43 | 47 | 62 | 4 | $23,117 | 0.958 | 0.896 | $22,146 | $17,705 | 14.6200 | $1,211 | $1,311 | 12.3778 | $16,227 | $5,919 |
| 10084 | Active | 24 | 35 | 62 | 11 | $20,587 | 0.729 | 0.41 | $15,008 | $5,483 | 16.7353 | $328 | $408 | 17.4135 | $7,105 | $7,903 |
| 10085 | Active | 25 | 43 | 62 | 18 | $24,121 | 0.896 | 0.44 | $21,612 | $5,239 | 17.4135 | $301 | $430 | 14.6200 | $6,287 | $15,325 |
| 10086 | Active | 32 | 59 | 62 | 27 | $25,960 | 1 | 0.65 | $25,960 | $5,852 | 18.0786 | $324 | $553 | 2.9427 | $1,627 | $24,333 |
| 10102 | Retired | 17 | 61 | 56 | 39 | $12,498 | 1 | 0.296 | $12,498 | $801 | 0 | 0 | 0 | 0.0000 | 0 | $12,498 |
| 10101 | Retired | 21 | 62 | 59 | 38 | $6,333 | 1 | 0.321 | $6,333 | $458 | 0 | 0 | 0 | 0.0000 | 0 | $6,333 |
| 10087 | Active | 24 | 41 | 62 | 17 | $21,815 | 0.86 | 0.41 | $18,761 | $4,592 | 16.7353 | $274 | $384 | 16.0439 | $6,161 | $12,600 |
| 10088 | Active | 46 | 60 | 62 | 14 | $26,211 | 1 | 0.943 | $26,211 | $14,273 | 13.1397 | $1,086 | $1,433 | 1.9808 | $2,838 | $23,373 |
| 10089 | Active | 28 | 32 | 62 | 4 | $19,998 | 0.65 | 0.534 | $12,999 | $9,128 | 18.0786 | $505 | $547 | 18.0786 | $9,889 | $3,110 |
| 10103 | Retired | 21 | 58 | 57 | 36 | $26,721 | 1 | 0.321 | $26,721 | $2,090 | 0 | 0 | 0 | 0.0000 | 0 | $26,721 |
| 10090 | Active | 59 | 66 | 62 | 7 | $5,449 | 1 | 1 | $5,449 | $4,141 | 2.9427 | $1,407 | $1,616 | 0.0000 | 0 | $5,449 |
| 10091 | Active | 38 | 53 | 62 | 15 | $24,497 | 1 | 0.799 | $24,497 | $10,868 | 16.7353 | $649 | $873 | 8.3379 | $7,279 | $17,218 |
| 10092 | Active | 25 | 35 | 62 | 10 | $20,587 | 0.729 | 0.44 | $15,008 | $6,119 | 17.4135 | $351 | $428 | 17.4135 | $7,453 | $7,555 |
| 10093 | Active | 27 | 31 | 62 | 4 | $7,749 | 0.622 | 0.503 | $4,820 | $3,332 | 17.4135 | $191 | $207 | 18.0786 | $3,742 | $1,078 |
| 10094 | Active | 28 | 33 | 62 | 5 | $20,193 | 0.677 | 0.534 | $13,671 | $8,863 | 18.0786 | $490 | $541 | 18.0786 | $9,781 | $3,890 |
| 10096 | Active | 31 | 36 | 62 | 5 | $20,787 | 0.753 | 0.622 | $15,653 | $10,627 | 18.0786 | $588 | $649 | 17.4135 | $11,301 | $4,352 |
| 10104 | Retired | 23 | 60 | 57 | 34 | $16,188 | 1 | 0.379 | $16,188 | $1,617 | 0 | 0 | 0 | 0.0000 | 0 | $16,188 |
| 10097 | Active | 41 | 52 | 62 | 11 | $24,261 | 1 | 0.86 | $24,261 | $13,553 | 16.0439 | $845 | $1,051 | 9.1775 | $9,646 | $14,615 |
| 10098 | Active | 34 | 65 | 62 | 31 | $4,243 | 1 | 0.703 | $4,243 | $884 | 18.0786 | $49 | $91 | 0.0000 | 0 | $4,243 |
| 10099 | Active | 33 | 58 | 62 | 25 | $27,883 | 1 | 0.677 | $27,883 | $7,081 | 18.0786 | $392 | $643 | 3.8861 | $2,499 | $25,384 |
| | | | | | | | | | | | | | $20,112 | | | $367,016 |

# FINAL

# ACOPEB

## Report on the OPEB Costs and Liability

## Little Compton School Non-Certified

## For the Year Ending June 30, 2013

## 11/14/2013

## Table of Contents



**Appendices:**

## Description of Report

This report was prepared using ACOPEB.com software to satisfy the requirements of Government Accounting Standards Board Statement No. 45 (GASB 45). This Statement requires that the annual cost and liability associated with other post employment benefits (OPEB) be computed and gradually brought onto the governments' books. If the Town of Little Compton, RI is using this report to comply with GASB 45, then the Town of Little Compton, RI has under 100 participants covered under the plan and is eligible for the alternative measurement method.

This report provides four primary results: the Actuarial Accrued Liability (AAL), the Unfunded Actuarial Accrued Liability (UAAL), the Annual Required Contribution (ARC), and the Net OPEB Obligation.

**The Actuarial Accrued Liability (AAL)** is the total projected liability for the post employment benefits covered under the plan. The AAL calculation uses the data on active employees, employees who have left employment but who are eligible for retiree healthcare, current retirees and their beneficiaries, and spouses who are eligible for the retiree healthcare benefit provided by the Town of Little Compton, RI. This information along with a set of economic assumptions (see page 8) is used to project the cost of these future benefits and then do an actuarial analysis on the future cost of the benefits to arrive at the AAL. These computations can be found in the appendix.

**Unfunded Actuarial Accrued Liability (UAAL)** is the AAL less the value of plan assets. Any plan assets used to reduce AAL will have been reported in a fiduciary fund on the fund financial statements.

**Annual Required Contribution (ARC)** is the current amortization of the UAAL and the normal costs that need to be reported in the basic financial statements.

**Net OPEB Obligation** is the ARC less certain contributions that can be counted as payment toward the ARC plus any prior year OPEB obligations.

For financial statement purposes, GASB 45 impacts the government-wide and/or the proprietary fund statements but does not affect the governmental fund financial statements. The ARC and Net OPEB Obligation will be among the adjusting entries made to convert the governmental funds from the modified accrual basis to the full accrual basis. The ARC amount will be expensed on the government-wide statement of activities. The Net OPEB Obligation amount will be reported as a liability on the government-wide statement of net assets. For proprietary funds, the impact of GASB 45 affects the fund financial statements, with the Net OPEB Obligation being reported as a liability and the ARC as an expense.

Additional note disclosures and required supplementary information (RSI) are required as a result of GASB 45. The portion of this disclosure related specifically to the computations has been provided on page 5.

# Results of the ACOPEB Calculation

| | | |
|---|---|---|
| Normal cost (current service cost) | $ | 462 |
| Amortization of UAAL (for past service) | | 531 |
| **Annual Required Contribution (ARC)** | | 993 |
| Interest on beginning net OPEB obligation | | 9 |
| ARC adjustment | | (10) |
| **Annual OPEB expense** | | 992 |
| Actual active employee matching contributions | | 0 |
| **Employer Portion of Annual OPEB expense** | | 992 |
| Actual current year employer contribution and/or payment | | 0 |
| Increase in OPEB obligation | | 992 |
| **Net OPEB obligation at beginning of year** | | 216 |
| **Net OPEB obligation at end of year** | | 1,208 |

| | | |
|---|---|---|
| Covered payroll | 197,652 | |
| Annual OPEB expense as a % of covered payroll | 0.50 | % |

## Source for Government-Wide Adjustments

| | |
|---|---|
| OPEB Expense presented in Government-wide Statement of Activities | **992** |
| Liability on the Government-wide Statement of Net Assets | **1,208** |

# OPEB Information for Note Disclosure and Required Supplementary Information

| | | Current Calculation |
|---|---|---|
| Actuarial accrued liabilities (AAL) | $ | 11,719 |
| Actuarial value of plan assets | | 0 |
| Unfunded actuarial accrued liabilities (UAAL) | | 11,719 |
| Funded Ratio | | 0 % |
| | | |
| Covered Payroll | $ | 197,652 |
| UAAL as % of Covered Payroll | | 5.93 % |

# Calculation of the Amortization of UAAL

| Amortization Component | |
|---|---|
| AAL | 11,719 |
| Less: Assets | 0 |
| UAAL | 11,719 |
| Divided by PV factor | 22.9592 |
| Amortization Payment | 510 |
| Current year interest | 20 |
| Total Amortization Payment | 531 |

## How the Results Affect Your Annual Financial Report

This report provides your organization's annual OPEB expense amount and the net OPEB obligation at the end of the year both of which will be reported in your financial statements. Additionally, the portion of the required note disclosure related specifically to the computations has been provided on page 5.

This report presents the ARC and net OPEB obligation as a total for the entire plan. In many cases it will be necessary to allocate the OPEB expense and net OPEB obligation between governmental and proprietary funds and/or to different programs within the government. When preparing the relative percentages to allocate these amounts, it is important to note that the retired members will not be represented in any current year FTE or payroll statistics. As a result, it may be most accurate when creating the relative percentages to use the plan data provided in this report, and then to determine where the retired members (including associated spouses) worked when creating the relative percentages.

**Applying the OPEB expense and Net OPEB Obligation Amount to your financial statements.**

If your organization only has governmental funds, the OPEB expense and net OPEB obligation are reported only on the government-wide financial statements.

If your organization has proprietary funds, the portion of the OPEB expense and the net OPEB obligation attributable to each proprietary fund is reported in the proprietary fund financial statements and on the government-wide financial statements.

# Report Assumptions

| | |
|---|---|
| Assumed retirement age | 62 |
| Discount rate | 4% |
| Average salary increase | 2% |
| Medical insurance premium increases (for both active and retired participants) | |
| Year 1 | 3% |
| Year 2 | 3% |
| Year 3 | 3% |
| Year 4 | 3% |
| Year 5 | 3% |
| Year 6 | 3% |
| Years 7-10 | 3% |
| Years 11-21 | 3% |
| Years 21 on | 3% |

Note: The medical insurance premium increases should be reasonably comparable with those found in the *National Health Care Expenditures Projections* of the Office of the actuary at the Centers for Medicare and Medicaid Services in 2007.

The probability of remaining employed until retirement age from current and entry age by age comes from the Table 1 in GASB Statement 45.

Life expectancy by gender comes from the *Life Expectancy Table* from National Center for Health Statistics updated in 2008.

# Disclaimer

The Town of Little Compton, RI provided all the information entered into ACOPEB.com necessary for the successful completion of the work. The Town of Little Compton, RI attests that the data provided is accurate, reflects reasonable assumptions, and is consistent with that required for calculation of OPEB costs and obligations. The Town of Little Compton, RI attests that the accuracy of the OPEB calculations is dependent on the accuracy of the data and holds harmless AFS Associates, Inc. from any misstatement of the Government's data.

AFS Associates, Inc provided the software to prepare this report on OPEB costs and obligations to meet the requirements of the alternative measurement methodology of GASB 45. However, AFS Associates, Inc. has not audited the data provided by the Town of Little Compton, RI and accordingly does not express an opinion on the quality or accuracy of the Government's data and is held harmless for the effects of any errors or misstatement of the results caused by inaccurate data or assumptions.

# APPENDIX

**Methodology** – A detailed description of how the calculations are done.

**Present Value Computation** – The columns in the table shows the calculation of the future benefits for each plan member for each future year. The individual year present values are calculated and then totaled to arrive at a total present value of future benefits for each plan member.

**ARC and AAL Using the Entry Age Actuarial Cost Method** – Shows the calculation of the normal cost at current age and the actuarial accrued liability (AAL) using the present value of future benefits for individual plan members from the previous table.

# Methodology

The methodology used for calculating the normal the annual required contribution and the actuarial accrued liability follows the process used in the example found in GASB Statement 45. However, ACOPEB.com uses only the entry age actuarial cost method (also called entry age normal actuarial cost method) of calculation and the level percent of payroll option. This is the methodology AFS Associates, Inc. believes is used by the majority of pension and OPEB plans.

ACOPEB.com uses the data entered as economic assumptions and member data to calculate the actuarial present value of future benefits for each individual. This projection uses the assumed retirement age for members of the plan and the employer's portion of health insurance premiums for current retirees and spouses as a statistical base to forecast the cost of future benefits. The projections differentiate between members who are Medicare eligible and those who are not. Premiums are inflated using future insurance premium increase assumptions. The life expectancy and thus the number of years benefits are projected to be received, is estimated based on the Expectation of Life by Age and Sex in the U.S. table prepared by the National Center for Health Statistics and updated in 2008. The assumed retirement age for active members and their spouses is adjusted to reflect any eligibility requirement, such as a vesting period, by entering an eligible retirement age in the member data for each active member. (For example, an active member is 62 years of age and has 3 years of service and the plan has an assumed retirement age of 65 with a vesting requirement of 10 years. For this member, the age entered in the eligibility requirements is 72 years of age. Benefits will begin at age 72 rather than the assumed retirement age of 65.) The benefits will begin at the eligible retirement age if greater than the assumed retirement age. If there is a minimum age requirement for spouses this will adjust when benefits start being received.

Unidentified former members who may be eligible for benefits are not included in the calculations. Children of active members are not considered in the calculations. Children of retirees receiving benefits are included as additional retired members in the member records. They are included for benefits until they reach the age when benefits terminate, as dictated by the plan.

The current annual premium for an active member represents what the plan is now paying for a retiree member or their spouse. For a retired member the current annual premium is the actual amount the plan paid for that member. As a result, the premiums entered for an active employee and spouse will be very similar, if not the same, as existing retired members and spouses.

A second premium amount is entered for when a member becomes eligible for Medicare. The Medicare premium for each member in the member records should be the amount of annual premiums covered by the plan which could include both the medicare premium and supplemental insurance premiums. The premiums are entered for each member in the member records. If a member is not eligible for Medicare, the Medicare premium value would be 0.

If the assumed retirement age is at or above that necessary to be eligible for Medicare, then the amount entered for both premiums would be the annual Medicare eligible premium. If the assumed retirement age is below the Medicare eligible age, the premium would be based on what the plan is now paying for retired members who are not Medicare eligible.

The annual premium is projected into the future for each member and their spouse. The cost of future premiums are computed using the premium inflation rates input on the economic assumptions page. This annual compounded inflation rate is published at the top of the Present Value Computations report in the appendix.

For active members, the projected costs begin when the member reaches the assumed retirement age, and/or the year they meet the vesting requirement. For active employees who are past the assumed retirement age, they are considered to be retired in the next year or the year in which they meet the plan's vesting requirement whichever is later. If the plan has a limit on the number of years a member will receive benefits after retirement the benefits will stop at the age when benefits terminate as entered in the member records. The projection of benefits ends when a member's life expectancy ends.

Generally speaking, spousal eligibility, terms, and projections of benefits follow the corresponding members. It is assumed that spouses become eligible for benefits when the member retires unless the plan has a minimum age requirement for spouses in which case spousal benefits may be deferred. When the member reaches his/her life expectancy the spousal benefits continue to be projected by their own life expectancy estimate unless the "Benefits Terminate" item is checked as True on the spouse's member record.

**Calculation of Projected Cost of Benefits**

The next 55 years of benefits are summed to calculate the total for future benefits. The total present value of future benefits is calculated using each year's estimated annual premium discounted by the discount rate entered on the economic assumption page. The discount rate is checked for reasonableness by AFS Associates, Inc.

**Calculation of Normal Cost at Current Age and Actuarial Accrued Liability (AAL)**

The present value of the future benefits for each member and spouse is then multiplied by the probability of the member remaining employed from current age until assumed retirement age and the probability of remaining employed from entry age until retirement age. These factors are from the table in GASB's Guide to Implementation of GASB Statements 43 and 45 on Other Post Employment Benefits . The resulting amounts are the present values adjusted for the probability of being paid from current age to retirement age and from entry age to retirement age.

The entry age present value adjusted for the probability of being paid is then divided by the PV factor of $1 per year from entry age to retirement age. The result is the normal cost at entry age. The normal cost at entry age is then inflated using the salary increase rate as the inflation factor for the number of years of employment to obtain the normal cost at current age for each member and spouse. The sum of these is the normal cost at current age for the plan.

The present value factor of $1 per year from current age to assumed retirement age is then multiplied by the normal cost at current age to obtain the present value of future normal cost.

The present value of future normal costs is then subtracted from the current-age probability-adjusted present value of total benefits to be paid. The resulting amount is the actuarial accrued liability (AAL) for each member and spouse. The sum of all individual AAL's is the AAL for the plan.

Calculation of the Amortization of UAAL

The current value of assets held by the plan is then subtracted from the AAL to determine the unfunded actuarial accrued liability (UAAL). This amount is then divided by the amortization present value factor based on a 30 year amortization period. The result is the amortization payment that would have been due at the beginning of the year. Interest for one year is then calculated using the discount rate. The sum of the amortization payment plus the interest on that amount for the current year is the total amortization amount for the current year.

Calculation of ARC and the Annual OPEB Expense

The total normal cost is then added to the total amortization payment to obtain the annual required contribution (ARC). The interest on the beginning of the year net OPEB obligation, if any, is calculated to be added to the ARC. An ARC adjustment is then calculated to be subtracted from the ARC. The resulting number is the annual OPEB expense.

Any active employee contributions for their future retiree healthcare are then subtracted from the OPEB expense to determine the employer portion of the annual OPEB expense. The annual employer contribution (or amount paid for benefits if a pay-as-you-go funding method is used) is then subtracted from the employer portion of the annual OPEB expense to determine the net change in the OPEB obligation. The Net Change in OPEB Obligation is then added to the Net OPEB Obligation at the beginning of the year to determine the Net OPEB obligation at the end of the year.

**Present Value Computations**
**Town of Little Compton, RI**
**For Fiscal Year 2013**

| ID / Year | Employment Status | Gender | Years Employed | Retirement Age | Age | Years of Benefit | Premium | Medicare Premium | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | 103.00% | 106.09% | 109.27% | 112.55% | 115.93% | 119.41% | 122.99% | 126.68% | 130.48% | 134.39% |
| 10127 | Active | F | 24 | 62 | 58 | 7 | 1500 | 1 | | | | | $1,500 | $1,500 | $1,500 | $1 | | |
| 10128 | Active | F | 13 | 62 | 46 | 19 | 1500 | 1 | | | | | | | | | | |
| 10129 | Active | F | 28 | 62 | 57 | 8 | 1500 | 1 | | | | | | $1,500 | $1,500 | $1,500 | $1 | |
| 10130 | Active | M | 37 | 62 | 55 | 10 | 1500 | 1 | | | | | | | | $1,500 | $1,500 | $1,500 |
| 10131 | Active | M | 7 | 62 | 36 | 29 | 1500 | 1 | | | | | | | | | | |
| 10132 | Active | F | 9 | 62 | 49 | 16 | 1500 | 1 | | | | | | | | | | |

**Present Value Computations**
**Town of Little Compton, RI**
**For Fiscal Year 2013**

| ID / Year | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 138.42% | 142.58% | 146.85% | 151.26% | 155.80% | 160.47% | 165.28% | 170.24% | 175.35% | 180.61% | 186.03% | 191.61% | 197.36% | 203.28% | 209.38% | 215.66% | 222.13% | 228.79% |
| 10127 | | | | | | | | | | | | | | | | | | |
| 10128 | | | | | | | $1,500 | $1,500 | $1,500 | $2 | | | | | | | | |
| 10129 | | | | | | | | | | | | | | | | | | |
| 10130 | $1 | | | | | | | | | | | | | | | | | |
| 10131 | | | | | | | | | | | | | | | | | $1,500 | $1,500 |
| 10132 | | | | $1,500 | $1,500 | $1,500 | $2 | | | | | | | | | | | |

**Present Value Computations**
**Town of Little Compton, RI**
**For Fiscal Year 2013**

| ID / Year | 2041 | 2042 | 2043 | 2044 | 2045 | 2046 | 2047 | 2048 | 2049 | 2050 | 2051 | 2052 | 2053 | 2054 | 2055 | 2056 | 2057 | 2058 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 235.66% | 242.73% | 250.01% | 257.51% | 265.23% | 273.19% | 281.39% | 289.83% | 298.52% | 307.48% | 316.70% | 326.20% | 335.99% | 346.07% | 356.45% | 367.15% | 378.16% | 389.50% |
| 10127 | | | | | | | | | | | | | | | | | | |
| 10128 | | | | | | | | | | | | | | | | | | |
| 10129 | | | | | | | | | | | | | | | | | | |
| 10130 | | | | | | | | | | | | | | | | | | |
| 10131 | $1,500 | $2 | | | | | | | | | | | | | | | | |
| 10132 | | | | | | | | | | | | | | | | | | |

**Present Value Computations**
**Town of Little Compton, RI**
**For Fiscal Year 2013**

| ID / Year | 2059 | 2060 | 2061 | 2062 | 2063 | 2064 | 2065 | 2066 | 2067 | 2068 | 2069 | 2070 | 2071 | 2072 | Total | Present Value of Benefits |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 401.19% | 413.23% | 425.62% | 438.39% | 451.54% | 465.09% | 479.04% | 493.41% | 508.21% | 523.46% | 539.17% | 555.34% | 572.00% | 589.16% | | |
| 10127 | | | | | | | | | | | | | | | $4,501 | $3,559 |
| 10128 | | | | | | | | | | | | | | | $4,502 | $2,223 |
| 10129 | | | | | | | | | | | | | | | $4,501 | $3,422 |
| 10130 | | | | | | | | | | | | | | | $4,501 | $3,164 |
| 10131 | | | | | | | | | | | | | | | $4,502 | $1,502 |
| 10132 | | | | | | | | | | | | | | | $4,502 | $2,501 |

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## ARC using the Entry Age Cost Method
## Town of Little Compton, RI
## For the Fiscal Year 2013

| Employee ID | Status | Entry Age | Employee Age | Assumed Retirement Age | Years of Past Service | Present Value of Total Benefits | Probability of remaining employed Current Age to Retirement | Probability of remaining employed Entry Age to Retirement | Present Value adjusted for probability of being paid | Entry Age Probability-Adjusted | PV factor of $1 per year from Entry age to Ret Age | Normal Cost at Entry Age | Normal Cost at Current Age | PV factor of $1 per year from current age to retirement | PV of future normal cost | AAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10127 | Active | 34 | 58 | 62 | 24 | $3,559 | 1 | 0.703 | $3,559 | $976 | 18.0786 | $54 | $87 | 3.8861 | $338 | $3,221 |
| 10128 | Active | 33 | 46 | 62 | 13 | $2,223 | 0.943 | 0.677 | $2,096 | $904 | 18.0786 | $50 | $65 | 13.1397 | $854 | $1,242 |
| 10129 | Active | 29 | 57 | 62 | 28 | $3,422 | 1 | 0.564 | $3,422 | $644 | 18.0786 | $36 | $63 | 4.8114 | $303 | $3,119 |
| 10130 | Active | 18 | 55 | 62 | 37 | $3,164 | 1 | 0.296 | $3,164 | $219 | 4.8114 | $46 | $96 | 6.6089 | $634 | $2,530 |
| 10131 | Active | 29 | 36 | 62 | 7 | $1,502 | 0.753 | 0.564 | $1,131 | $644 | 18.0786 | $36 | $41 | 17.4135 | $714 | $417 |
| 10132 | Active | 40 | 49 | 62 | 9 | $2,501 | 0.986 | 0.841 | $2,466 | $1,478 | 16.0439 | $92 | $110 | 11.6009 | $1,276 | $1,190 |
| | | | | | | | | | | | | | $462 | | | $11,719 |