# City Of St. Albans, West Virginia Policemen's Pension and Relief Fund

**Actuarial Valuation Report**
**for the Year Beginning July 1, 2017**

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August 24, 2018

| | |
|---|---|
| Ms. Barbara Hughes | Lt. Philip A. Bass |
| City Treasurer | Pension Board Secretary |
| 1499 MacCorkle Avenue, P.O. Box 1488 | City of St. Albans Policemen's Pension and Relief Fund |
| St. Albans, WV 25177 | |

**Subject: City of St. Albans Policemen's Pension and Relief Fund**
**Actuarial Valuation Report for the Year Beginning July 1, 2017**

Dear Ms. Hughes and Lt. Bass:

Upon the request of the Municipal Pensions Oversight Board, we have performed an actuarial valuation as of July 1, 2017, for the City of St. Albans, West Virginia Policemen's Pension and Relief Fund ("Fund" or "Plan"). This actuarial valuation has been performed in accordance with the West Virginia Code Chapter 8, Article 22, Sections 16 through 28, inclusive.

In accordance with West Virginia Code §8-22-20, this actuarial valuation report provides information on:

- The sponsor's funding requirements for the fiscal year ending June 30, 2019, based on the selected funding policy, i.e. the Alternative funding policy as defined in West Virginia Code §8-22-20(c)(1)
- The Fund's eligibility to receive an allocation of the premium tax for the fiscal year ending June 30, 2019
- The Fund's eligibility to provide supplemental benefits for the plan year beginning July 1, 2019

This report also provides illustrative projections under two other funding policies available to the sponsor – the Optional funding policy as defined in West Virginia Code §8-22-20(e), and the Conservation funding policy as defined in West Virginia Code §8-22-20(f).

West Virginia Code §8-22-20 (c)(4), requires (1) a review of the actuarial assumptions and methods at least once every five years and (2) that the Actuary shall provide a report to the oversight board with recommendations on any changes to the actuarial process. Consequently, an experience review was performed for the period July 1, 2009, through June 30, 2014. The assumptions and methods were recommended by the actuary, in the report *2016 Experience Review for the Years July 1, 2009, to July 1, 2014*, approved by the Municipal Pensions Oversight Board, and became effective for the actuarial valuation as of July 1, 2015.

This actuarial valuation is based upon:

**Plan Member Data –** Data for active members and persons receiving benefits from the Fund as of June 30, 2017, was provided by the Fund's staff. We have tested this data for reasonableness.

**Asset Values –** A reconciliation of market value of assets during the plan year ended June 30, 2017, and a list of assets held as of June 30, 2017, by investment category, were provided by the Fund.

**Plan Provisions –** A summary of the key plan provisions valued are set forth in Section VII of the report: Summary of Principal Plan Provisions.

**Actuarial Methods –** Fund liabilities were measured using the Entry-Age Normal Actuarial Cost Method. The actuarial valuation was based on the market value of assets. The actuarial methods used in the actuarial valuation are set forth in Section VI of the report: Actuarial Assumptions and Methods.

**Actuarial Assumptions –** The actuarial assumptions used include a discount rate of 5.50%. The actuarial assumptions used in the actuarial valuation are set forth in Section VI of the report: Actuarial Assumptions and Methods.

The actuarial valuation results disclosed in this report are based on the data and actuarial assumptions and methods described above, and upon the provisions of the Plan as of the actuarial valuation date. Based on these items, we certify these results to be true and correct.

To the best of our knowledge, this actuarial statement is complete and accurate, and has been prepared in accordance with generally accepted actuarial principles and practices.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law.

This report should not be relied on for any purpose other than the purpose stated.

The signing actuaries are independent of the plan sponsor.

Alex Rivera and Lance J. Weiss are Members of the American Academy of Actuaries (MAAA) and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein.

Sincerely,

| | |
|---|---|
| Alex Rivera, FSA, EA, MAAA, FCA | Lance J. Weiss, EA, MAAA, FCA |
| Senior Consultant | Senior Consultant |

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# SECTION I

## ACTUARIAL VALUATION RESULTS AS OF JULY 1, 2017

# Executive Summary

Upon the request of the Municipal Pensions Oversight Board (MPOB), we have performed an actuarial valuation as of July 1, 2017, for the City of St. Albans, West Virginia Policemen's Pension and Relief Fund ("Fund" or "Plan").

In accordance with West Virginia Code §8-22-20, this actuarial valuation report provides information on:

- The sponsor's funding requirements for the fiscal year ending June 30, 2019
- The Fund's eligibility to receive an allocation of the premium tax for the fiscal year ending June 30, 2019
- The Fund's eligibility to provide supplemental benefits for the plan year beginning July 1, 2019

This report is based on the sponsor's election to finance benefit obligations using the Alternative funding policy as defined in West Virginia Code §8-22-20 (c)(1).

The key features of the Alternative funding policy, effective as of June 30, 1991, are summarized below:

- The sponsor's initial Alternative contribution effective for plan year 1991 is the greater of 107% of the amount contributed for the plan year ended June 30, 1990, or the highest five-year average of contributions made since 1984.

- Sponsor contributions made in subsequent years cannot be less than 107% of the contribution made in the prior fiscal year.

- The actuary must certify in writing that the Fund is projected to be solvent under the Alternative funding policy for the next consecutive 15-year period. A plan is deemed to be solvent if projected assets are greater than zero over the 15-year projection period.

- Beginning September 1, 2003, any municipality which elected the Alternative funding policy has the option of reverting to the Standard funding policy if the plan's funded ratio is greater than 80%. In this case, the Standard minimum contribution equals the normal cost plus the amortization of the unfunded liability over a period of not more than 40 years commencing from July 1, 1991, less the allocable portion of the state premium tax fund for municipal pension and relief funds.

- Plan members hired before January 1, 2010, contribute 7.0% of pay; however, if elected by the Board of Trustees of the Plan, member contributions may be increased up to 9.5% of pay. The Board elected to increase member contributions to 9.5% of pay. Employees hired on or after January 1, 2010, contribute 9.5% of pay.

- The Plan also receives premium tax allocation assigned to the Fund for the plan year.

This report also provides illustrative projections under two other funding policies available to the sponsor – the Optional funding policy as defined in West Virginia Code §8-22-20(e), and the Conservation funding policy as defined in West Virginia Code §8-22-20(f).

# Executive Summary (Continued)

The following table provides the Plan's funded status:

| Funded Status as of: | July 1, 2017 |
|---|---|
| Assets | $6,845,424 |
| Actuarial Accrued Liability | $14,887,506 |
| Unfunded Actuarial Accrued Liability | $8,042,082 |
| Funded Ratio | 45.98% |

The following table provides the employer contributions for the fiscal year ended June 30, 2018, under the Alternative funding policy:

| Employer Contributions for FYE: | June 30, 2018 |
|---|---|
| FYE 06/30/2017 Alternative Contribution | $283,361 |
| 7% Increase in Alternative Contribution | $19,835 |
| FYE 06/30/2018 Alternative Contribution | $303,196 |
| Additional Contribution | $0 |
| Final FYE 06/30/2018 Alternative Contribution | $303,196 |

The following table provides the estimated employer contributions for the fiscal year ending June 30, 2019, under the Alternative funding policy:

| Estimated Employer Contributions for FYE: | June 30, 2019 |
|---|---|
| FYE 06/30/2018 Alternative Contribution | $303,196 |
| 7% Increase in Alternative Contribution | $21,224 |
| FYE 06/30/2019 Alternative Contribution | $324,420 |
| Additional Contribution to satisfy 15-year Solvency Test on an Open Group Basis (to receive 100% of the State Premium Tax Allocation) | $0 |
| Estimated Employer Contribution for FYE 06/30/2019 to receive 100% of the State Premium Tax Allocation | $324,420 |
| Additional Contribution to satisfy 15-year Solvency Test on a Closed Group Basis (to grant Supplemental Benefits; i.e. COLA increases) | $0 |
| Estimated Employer Contribution for FYE 06/30/2019 to receive 100% of the State Premium Tax Allocation and to grant Supplemental Benefits; i.e. COLA increases | $324,420 |

A sponsor using the Alternative funding policy must satisfy the solvency test, as referenced in West Virginia Code section §8-22-20 (c)(1) in order to receive 100% of the State premium tax allocation, or grant Supplemental Benefits to plan members. We understand that the minimum requirement to satisfy the statutory solvency test includes a demonstration that the assets are projected to be greater than zero over a 15-year period. The statutes also require that an actuary perform the projection and certify the solvency test. However, the statutes provide little guidance on the parameters used to perform the solvency projections.

Under the current minimum statutory requirements, a sponsor of a poorly funded plan could provide Supplement Benefits to members, effectively deplete assets over a 15-year period, and have no available assets reserved to pay the benefits of current or future retirees after the 15-year period. For this reason, we recommend performing projections that include a margin for conservatism and satisfy the minimum statutory requirement for solvency. For this purpose we recommend performing projections that assume contributions for members hired after the actuarial valuation date will not be used to finance the unfunded liabilities of current members as of the actuarial valuation date. That is, assets and liabilities associated with new plan members are excluded from the solvency projections used to certify the solvency test for purposes of providing Supplemental Benefits. In this report projections that exclude new members are called "Closed Group Projections."

The statutes also require that the Plan satisfy the solvency test in order to receive the State premium tax allocation. For this purpose we recommend using less conservatism in the projections in order to ensure that the Plan receives the greatest allowable State premium tax allocation. A projection that includes assets and liabilities for members hired after the actuarial valuation would be less conservative. In this report projections that include new members are called "Open Group Projections."

The sponsor is projected to satisfy the 15-year solvency test without making additional annual contributions in excess of the minimum alternative contribution.

## Commentary on Premium Tax Allocation

Under §8-22-19 of the West Virginia Code, the plan sponsor is required to deposit the statutory contribution on a monthly basis at a rate of one-twelfth of the annual requirement, in order to receive the premium tax allocation from the Municipal Pensions Security Fund. Revenues which are specifically collected for the Fund, including employee payroll contributions, must be deposited within five days of receipt.

Based upon discussions with the MPOB, we understand the annual premium tax allocation is determined by September 1st each year. Municipalities can begin invoicing the MPOB for their share of the premium tax allocation after receiving their state provided actuarial study and after the municipality has made employer contributions to the local Plan. Each municipal treasurer shall use the invoice template provided by the MPOB to begin drawing down the state allocation for the municipal pension plan. This July 1, 2017, Actuarial Report from GRS is to be used by municipal pension plans to draw down the September 1, 2018 State Premium Tax Allocation which is allocated in Fiscal Year 2019. *The actuarial valuation and projection results assume the sponsor will make the statutory contributions on a monthly basis in accordance with statutes, including any additional amounts needed to satisfy the 15-year solvency test on an open group projection basis, and will be eligible to receive the premium tax allocation.*

## Commentary on Solvency Projections and Supplemental Benefits

Under § 8-22-26a of the West Virginia Code, all retirees, surviving spouses, and disabled pensioners are eligible for Supplemental Benefits that include automatic cost-of-living benefits commencing on the first day of July following two years of retirement. The benefit equals the percentage increase in the Consumer Price Index, limited to 4.0 percent (2.0 percent for certain disabled pensioners), multiplied by the sum of the allowable amount (first $15,000 of initial benefits paid) and the accumulated supplemental pensions paid in prior years.

The Court of Appeals decision requires that Supplemental Benefits be provided on “the allowable amount of the first $15,000 of the total annual pension paid in addition to the accumulated supplemental pension from the previous years.” The decision implies that compound cost-of-living increases should be applied to both the allowable amount of $15,000 and the accumulated supplemental pension amounts for prior years. Additional Supplemental Benefits are payable only if the Plan satisfies the minimum standard for actuarial soundness as defined in West Virginia Code § 8-22-20. This minimum standard requires that the fund remain “solvent” over the next 15-year projection period. Based on discussions with the West Virginia Municipal Pensions Oversight Board, and our understanding of the administrative practices of other local police and fire pension funds in West Virginia, the “solvency” requirement generally means that the fund’s market value of assets is projected to be greater than zero for all plan years prior to the end of the 15-year projection period. The projection is based on the most recent actuarial valuation and assumes the plan sponsor will make contributions according to the funding policy elected by the sponsor as defined by West Virginia Code, including any additional amounts needed to satisfy the 15-year solvency test on a closed group projection basis. *Although the 15-year solvency test may satisfy the minimum standard for actuarial soundness under the statutes, it is not necessarily consistent with generally accepted actuarial principles.*

The Supplemental benefits for plan year beginning July 1, 2019 will be based on the Consumer Price Index for calendar year 2018, and the projected results of the July 1, 2017 actuarial valuation.

## Additional Remarks on the Actuarial Valuation Results

Following are additional remarks on the actuarial valuation results as of July 1, 2017:

- The actuarial assumptions and methods were recommended by the actuary, in the report *2016 Experience Review for the Years July 1, 2009, to July 1, 2014*, and approved by the Municipal Pensions Oversight Board and became effective beginning with the actuarial valuation as of July 1, 2015. The key actuarial assumptions are fully disclosed in Section VI of the report.
- The interest rate used to discount liabilities remained the same for the July 1, 2016 and July 1, 2017 actuarial valuations.
    - The interest rate assumption was developed by reviewing the Plan's current funded ratio, the 15-year projected funded ratio, the ratio of assets to benefits, the percentage of assets allocated to equities and the funding policy selected. The details of the methodology used to select the discount rate are presented in Section VI of the report. As of July 1, 2017, the Plan's funded ratio of 46% (using a testing interest rate of 5.50% for all plans using the Alternative funding policy), ratio of assets to benefits of 9.80, equity allocation of 49%, and 15-year projected funded ratio of 58%, resulted in a discount rate assumption of 5.50%.
- The Fund experienced an approximate annualized return of 8.93% on the market value of assets during the plan year ended June 30, 2017, which compares to the expected annualized return of 5.50%. The difference in actual versus expected return produced an asset (gain)/loss of ($216,247).
- An actuarial valuation is based on the expectation of certain events such as salary increases, retirement, disability, mortality, termination, and cost of living increases. Demographic or liability experience (gains)/losses are generated when the actual occurrence of such events differs from the expectation. During the plan year ended June 30, 2017, the fund experienced a net liability (gain)/loss of ($47,933) due to these events.

## Alternative Funding

Following are additional remarks on the actuarial valuation projections under the current funding policy.

Based on the open group projections shown in Table 2, page II-2 and assuming that the sponsor makes the statutory required contributions, if all actuarial assumptions are realized in the future, including an investment return of 5.50%:

- The funded ratio is projected to increase from 46% at June 30, 2017, to 59% at June 30, 2033, and 100% at 2049.
- Employer contributions are expected to increase from $303,196 (or 27% of pay) for the fiscal year end June 30, 2018, to $2,469,566 (or 68% of pay) for fiscal year end June 30, 2049.

Please note that a funded ratio of only 46% at June 30, 2017, means that the plan is underfunded.

The Alternative funding policy is not consistent with generally accepted actuarial principles because it does not recognize emerging gains or losses.

A funding policy consistent with generally accepted actuarial principles is typically based on the sponsor contributing the normal cost net of employee contributions plus an amortization of the unfunded actuarial accrued liability. The annual amortization amount is generally 6% to 7% of the unfunded actuarial accrued liability. Under state statute, the annual premium tax allocation can only be used to finance the amortization of the unfunded actuarial accrued liability. For fiscal year end 2019, the Alternative funding policy contribution of $324,420 is sufficient to finance only 89% of the net employer normal cost of $366,550. The state premium tax allocation of $239,708 is sufficient to finance only 3.0% of the unfunded actuarial accrued liability of $8,042,082.

This actuarial valuation assumes that the City will be able to make future contributions on a timely basis. The ability of the plan to become funded is heavily dependent on the City contributing the minimum employer contribution calculated under the Alternative funding policy for each and every future year. We did not perform an analysis of the ability of the City to make future contributions. Such an analysis is not within the scope of our assignment or within our analytical skill set. Failure to receive City contributions on a timely basis could jeopardize the sustainability of the Fund.

Please understand that minimum employer contribution calculated under the Alternative funding policy as defined in West Virginia Code 8-22-20 (c)(1) is just that – the minimum that needs to be contributed each and every year. Because this is an underfunded plan, we continue to recommend that the plan sponsor consider making additional contributions (in excess of the minimum requirement) to ensure that there are sufficient assets available in the fund in all years to pay the promised benefits.

If the minimum employer contributions (calculated under the Alternative funding policy) are not made or investment return is less than the assumption of 5.50%, the funded ratio will be lower and the cash flow strain could be higher. If another significant market downtown occurs while the plan's funded ratio is declining, the plan may need to liquidate assets in order to pay benefits which could have a further adverse effect on the funded status of the System.

Under the Alternative funding policy, City contributions increase by seven percent and do not change as a result of emerging actuarial experience. However, emerging experience gains and losses could impact the Plan's funded ratio as follows:

- If the actual return on assets is *less* than the assumed return of 5.50%, then contributions will generally *increase*. Conversely, if the actual return is *greater* than the assumed return, contributions will generally *decrease*.
- If salaries *increase* by more than assumed, contributions could *increase*. If salaries *decrease* by more than assumed, contributions could *decrease.*
- If active members retire *sooner* than expected, contributions will generally *increase.* If active members retire *later* than expected, contributions will generally *decrease*.
- If active members become disabled during the year, contributions could increase.
- If retired members die *later* than expected, contributions will increase. If retired members die *sooner* than expected, contributions will decrease.

- If the general inflation is *greater* than assumed, supplemental benefits will be greater than assumed and contributions will *increase*. Conversely, if general inflation is *lower* than assumed, contributions will *decrease*.

At least once every five years, GRS performs an experience review analysis and updates the actuarial valuation assumptions. For example, if salary increases were consistently lower than assumed during the experience period, then the salary increase rate would likely be lowered. Or if more members retired than assumed, then the retirement rates would likely be increased. Any change in actuarial assumption will also impact the City's funded ratio. The objective of a change in assumptions is to reduce the level of experience gains and losses in future actuarial valuations.

# Schedule A: Summary of Key Valuation Results

| | | | | |
|---|---|---|---|---|
| Valuation Date | | **July 1, 2016** | | **July 1, 2017** |
| Valuation Interest Rate | | 5.50% | | 5.50% |
| Cost-of-Living Adjustment | | 2.75% | | 2.75% |
| Wage Inflation | | 3.75% | | 3.75% |
| Expected Payroll | | $1,078,997 | | $1,133,893 |
| Average Pay | | $44,958 | | $45,356 |
| Expected Benefit Payments | | $653,826 | | $698,459 |
| 1. Actuarial Accrued Liability | No. | | No. | |
| (a) Actives | 24 | $4,626,304 | 25 | $4,374,929 |
| (b) Retirees | 14 | $8,639,381 | 15 | $9,395,667 |
| (c) Survivors | 3 | $554,833 | 3 | $543,338 |
| (d) Disabled Members | 1 | $539,752 | 1 | $573,572 |
| (e) Deferred Vested Members | 0 | $0 | 0 | $0 |
| (f) Total | 42 | $14,360,270 | 44 | $14,887,506 |
| 2. Present Value of Future Normal Costs | | $5,015,420 | | $5,718,374 |
| 3. Present Value of Benefits (1(f) + 2) | | $19,375,690 | | $20,605,880 |
| 4. Market Value of Assets | | $6,314,273 | | $6,845,424 |
| 5. Unfunded Actuarial Accrued Liability (1(f) - 4) | | $8,045,997 | | $8,042,082 |
| 6. Funded Ratio (4 / 1(f)) | | 43.97% | | 45.98% |
| 7. Net Employer Normal Cost | | | | |
| (a) Normal Cost | | $438,163 | | $469,689 |
| (b) Administrative Expenses | | $4,300 | | $4,581 |
| (c) Gross Normal Cost (a + b) | | $442,463 | | $474,270 |
| (d) Employee Contribution Rate [a] | | 9.50% | | 9.50% |
| (e) Expected Employee Contributions | | $102,505 | | $107,720 |
| (f) Net Employer Normal Cost (c - e) | | $339,958 | | $366,550 |
| ( % of Compensation) | | 31.51% | | 32.33% |
| | | **FYE 2018** | | **FYE 2019** |
| 8. Estimated Minimum Employer Contribution [b] | | | | |
| (a) Prior Year Alternative Contribution | | $283,361 | | $303,196 |
| (b) Increase in Alternative Contribution | | 7.00% | | 7.00% |
| (c) Current Year Alternative Contribution | | $303,196 | | $324,420 |
| (d) Additional Contribution | | $0 | | $0 |
| (e) Alternative Contribution ( c + d ) | | $303,196 | | $324,420 |

[a] Blended rate reflecting 9.5% for members hired before January 1, 2010, and 9.5% for members hired after January 1, 2010.

[b] Estimated Minimum Employer Contribution is based on Alternative funding policy and is assumed to be made in plan year ending June 30, 2019.

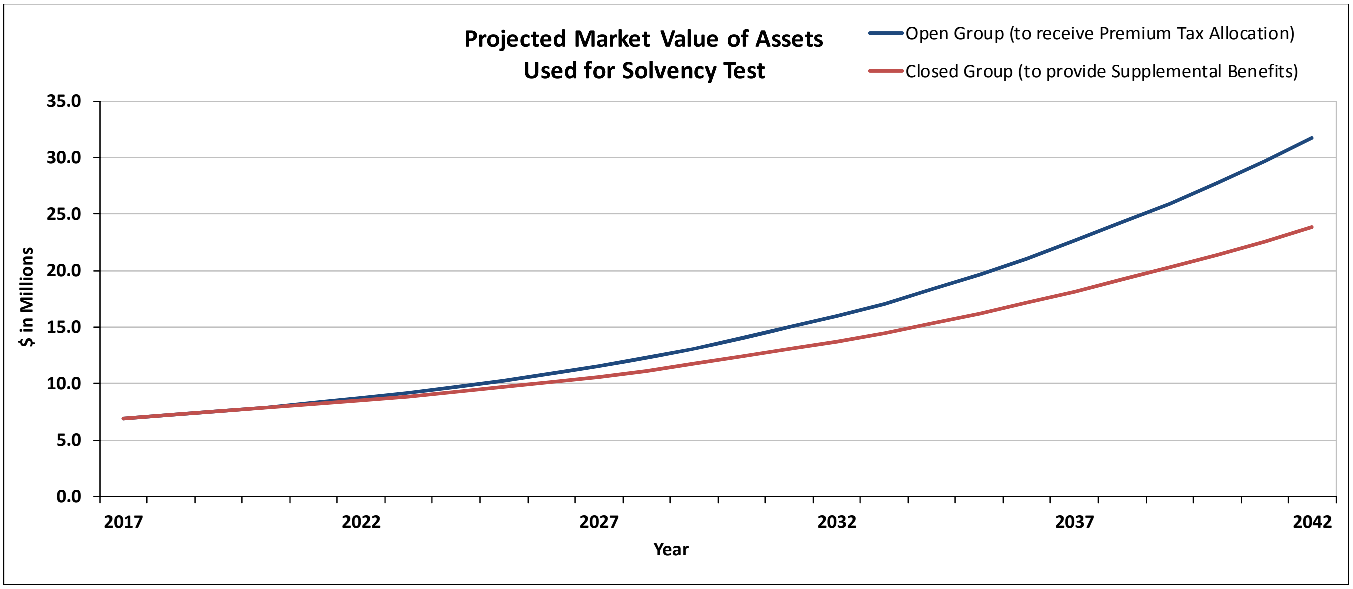
# Schedule B: (Gain)/Loss Analysis

**Experience (Gain)/Loss for Plan Year Ended June 30, 2017**

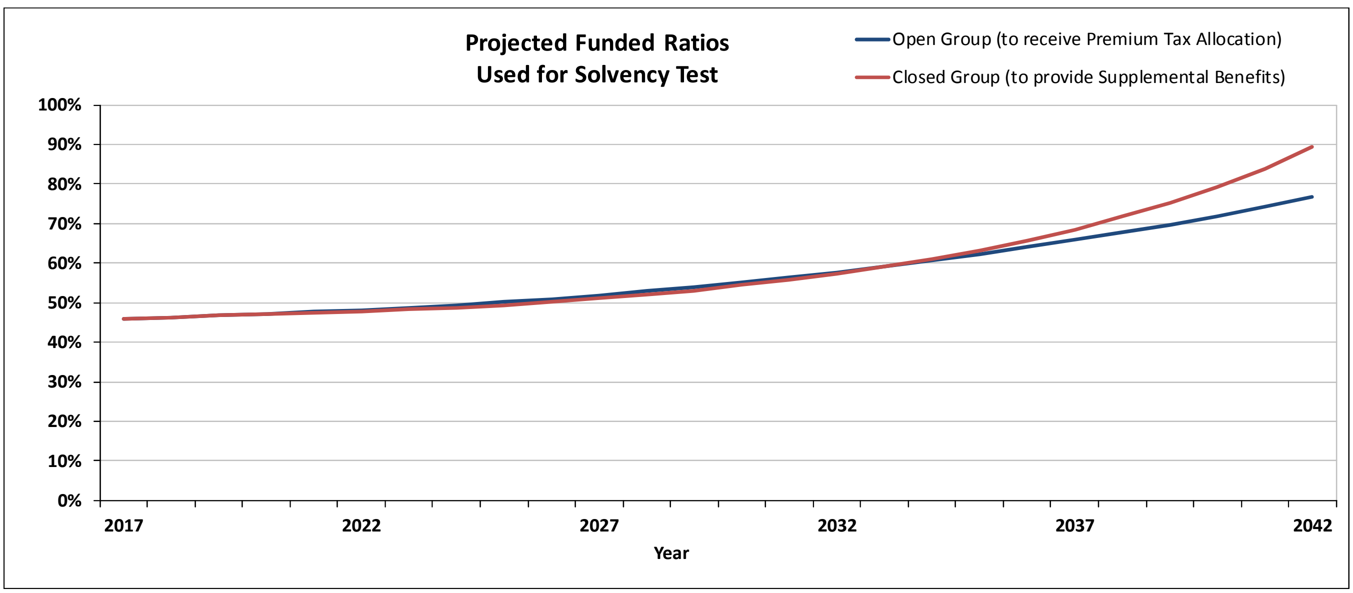
| | | |
|---|---|---|
| 1. | (a) Actuarial Accrued Liability as of 7/1/2016 | $14,360,270 |
| | (b) Normal Cost due 7/1/2016 | $438,163 |
| | (c) Interest on (a) and (b) to 6/30/2017 | $801,864 |
| | (d) Benefit Payments with interest to 6/30/2017 | $664,858 |
| | (e) Effect of Assumption Changes | $0 |
| | (f) Expected Liability at 7/1/2017 [(a) + (b) + (c) - (d) + (e)] | $14,935,439 |
| | (g) Actual Liability at 7/1/2017 | $14,887,506 |
| | (h) Liability (Gain)/Loss [(g) - (f)] | **($47,933)** |
| 2. | (a) Market Value of Assets as of 7/1/2016 | $6,314,273 |
| | (b) Interest on (a) to 6/30/2017 | $347,285 |
| | (c) Contributions with interest to 6/30/2017 | $632,477 |
| | (d) Benefit Payments with interest to 6/30/2017 | $664,858 |
| | (e) Expected Assets at 6/30/2017 [(a) + (b) + (c) - (d)] | $6,629,177 |
| | (f) Actual Assets at 7/1/2017 | $6,845,424 |
| | (g) Asset (Gain)/Loss [(e) - (f)] | **($216,247)** |
| 3. | Total (Gain)/Loss [1(h) + 2(g)] | **($264,180)** |

# Graphs 1A and 1B: Solvency Projections

## Graph 1A




## Graph 1B



# SECTION II

## ACTUARIAL PROJECTIONS

### ALTERNATIVE FUNDING POLICY

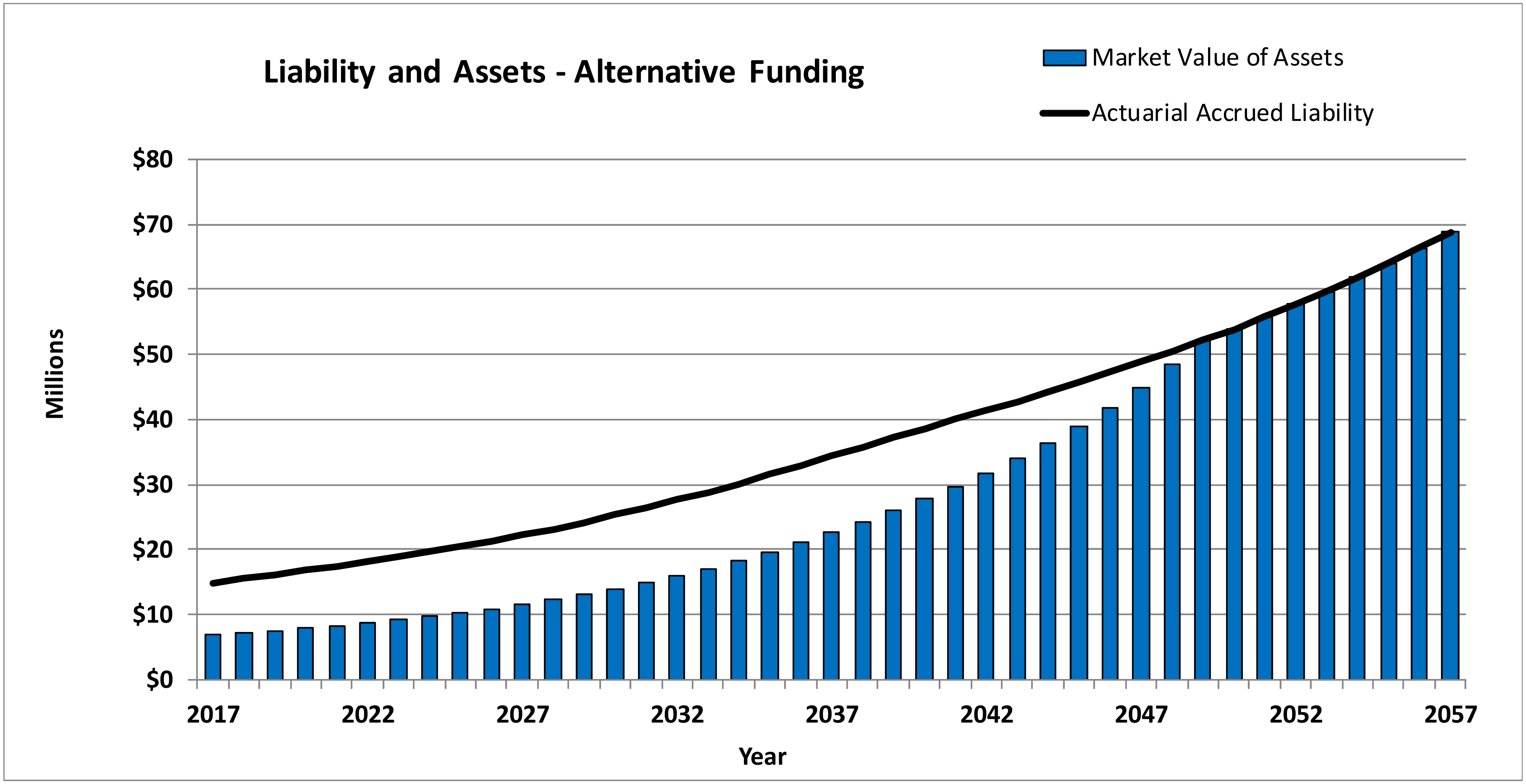
# Alternative Funding on a Closed Group Basis, Table 1

| Valuation | Number | | | Total Assets | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Plan Year End 30-Jun | Active | Pay Status | Total Payroll | Assets (boy) | Benefit Payments | Expenses | Employer Contributions | Employee Contributions | Premium Tax Allocation Contributions | Investment Income | Assets (eoy) | Actuarial Accrued Liability | Unfunded Liability | Funded Ratio |
| 2017 | 25 | 19 | $1,078,997 | $6,314,273 | $647,064 | $600 | $283,360 | $105,346 | $226,843 | $563,266 | $6,845,424 | $14,887,506 | $8,042,082 | 46% |
| 2018 | 23 | 20 | 1,133,893 | 6,845,424 | 698,459 | 4,581 | 303,196 | 107,720 | 231,517 | 374,854 | 7,159,671 | 15,471,834 | 8,312,163 | 46% |
| 2019 | 22 | 20 | 1,135,357 | 7,159,671 | 708,016 | 4,594 | 324,420 | 107,859 | 239,708 | 392,680 | 7,511,728 | 16,079,026 | 8,567,298 | 47% |
| 2020 | 20 | 21 | 1,118,100 | 7,511,728 | 742,652 | 4,617 | 347,129 | 106,219 | 224,574 | 411,263 | 7,853,645 | 16,676,336 | 8,822,691 | 47% |
| 2021 | 19 | 22 | 1,093,393 | 7,853,645 | 781,207 | 4,649 | 371,428 | 103,872 | 217,608 | 429,428 | 8,190,125 | 17,255,670 | 9,065,545 | 47% |
| 2022 | 17 | 22 | 1,077,659 | 8,190,125 | 816,191 | 4,689 | 397,428 | 102,378 | 214,052 | 447,553 | 8,530,655 | 17,824,798 | 9,294,143 | 48% |
| 2023 | 16 | 23 | 1,063,700 | 8,530,655 | 850,346 | 4,734 | 425,248 | 101,052 | 210,030 | 465,964 | 8,877,869 | 18,385,131 | 9,507,262 | 48% |
| 2024 | 16 | 23 | 1,065,750 | 8,877,869 | 872,551 | 4,783 | 455,015 | 101,246 | 208,088 | 485,217 | 9,250,101 | 18,954,927 | 9,704,826 | 49% |
| 2025 | 15 | 23 | 1,075,876 | 9,250,101 | 889,097 | 4,838 | 486,866 | 102,208 | 207,029 | 506,101 | 9,658,371 | 19,543,768 | 9,885,397 | 49% |
| 2026 | 14 | 23 | 1,092,666 | 9,658,371 | 900,801 | 4,898 | 520,947 | 103,803 | 206,839 | 529,199 | 10,113,461 | 20,160,525 | 10,047,064 | 50% |
| 2027 | 13 | 24 | 1,090,649 | 10,113,461 | 925,871 | 4,965 | 557,413 | 103,612 | 207,258 | 554,543 | 10,605,451 | 20,783,929 | 10,178,478 | 51% |
| 2028 | 13 | 24 | 1,078,136 | 10,605,451 | 957,783 | 5,037 | 596,432 | 102,423 | 205,589 | 581,716 | 11,128,791 | 21,402,202 | 10,273,411 | 52% |
| 2029 | 12 | 24 | 1,082,818 | 11,128,791 | 977,607 | 5,109 | 638,182 | 102,868 | 205,581 | 611,105 | 11,703,810 | 22,035,277 | 10,331,467 | 53% |
| 2030 | 12 | 24 | 1,095,261 | 11,703,810 | 993,761 | 5,185 | 682,855 | 104,050 | 206,259 | 643,553 | 12,341,581 | 22,691,181 | 10,349,600 | 54% |
| 2031 | 10 | 25 | 1,072,835 | 12,341,581 | 1,032,570 | 5,262 | 730,655 | 101,919 | 207,322 | 678,843 | 13,022,489 | 23,332,742 | 10,310,253 | 56% |
| 2032 | 9 | 25 | 1,022,137 | 13,022,489 | 1,089,201 | 5,343 | 781,801 | 97,103 | 205,477 | 715,961 | 13,728,287 | 23,928,313 | 10,200,026 | 57% |
| 2033 | 9 | 26 | 989,809 | 13,728,287 | 1,126,926 | 5,425 | 836,527 | 94,032 | 204,997 | 755,143 | 14,486,634 | 24,502,463 | 10,015,829 | 59% |
| 2034 | 8 | 26 | 956,166 | 14,486,634 | 1,164,615 | 5,512 | 895,084 | 90,836 | 205,484 | 797,342 | 15,305,252 | 25,053,621 | 9,748,369 | 61% |
| 2035 | 7 | 26 | 917,549 | 15,305,252 | 1,208,496 | 5,606 | 957,740 | 87,167 | 206,159 | 842,792 | 16,185,008 | 25,571,891 | 9,386,883 | 63% |
| 2036 | 7 | 27 | 880,168 | 16,185,008 | 1,250,165 | 5,701 | 1,024,782 | 83,616 | 207,189 | 891,796 | 17,136,524 | 26,058,465 | 8,921,941 | 66% |
| 2037 | 5 | 28 | 800,629 | 17,136,524 | 1,314,852 | 5,800 | 1,096,517 | 76,060 | 208,245 | 944,141 | 18,140,836 | 26,468,606 | 8,327,770 | 69% |
| 2038 | 4 | 28 | 679,968 | 18,140,836 | 1,406,310 | 5,899 | 1,173,273 | 64,597 | 207,357 | 998,642 | 19,172,495 | 26,753,132 | 7,580,637 | 72% |
| 2039 | 3 | 29 | 570,417 | 19,172,495 | 1,494,385 | 6,000 | 1,255,402 | 54,190 | 207,384 | 1,054,937 | 20,244,023 | 26,916,315 | 6,672,292 | 75% |
| 2040 | 3 | 29 | 461,271 | 20,244,023 | 1,580,592 | 6,100 | 1,343,280 | 43,821 | 208,876 | 1,113,674 | 21,366,981 | 26,954,671 | 5,587,690 | 79% |
| 2041 | 2 | 30 | 356,234 | 21,366,981 | 1,657,892 | 6,201 | 1,437,310 | 33,842 | 210,048 | 1,175,648 | 22,559,736 | 26,871,433 | 4,311,697 | 84% |
| 2042 | 1 | 30 | 267,229 | 22,559,736 | 1,725,041 | 6,303 | 1,537,922 | 25,387 | 212,343 | 1,241,988 | 23,846,031 | 26,678,514 | 2,832,483 | 89% |
| 2043 | 1 | 30 | 197,467 | 23,846,031 | 1,777,489 | 6,405 | 1,645,577 | 18,759 | 215,264 | 1,314,128 | 25,255,866 | 26,394,198 | 1,138,332 | 96% |
| 2044 | 1 | 30 | 151,828 | 25,255,866 | 1,806,867 | 6,506 | 996,772 | 14,424 | 218,999 | 1,373,250 | 26,045,937 | 26,045,937 | 0 | 100% |
| 2045 | 0 | 30 | 108,045 | 26,045,937 | 1,835,427 | 6,607 | 34,551 | 10,264 | 0 | 1,383,765 | 25,632,483 | 25,632,483 | 0 | 100% |
| 2046 | 0 | 29 | 72,831 | 25,632,483 | 1,856,001 | 6,706 | 25,585 | 6,919 | 0 | 1,360,130 | 25,162,409 | 25,162,409 | 0 | 100% |
| 2047 | 0 | 29 | 50,528 | 25,162,409 | 1,863,223 | 6,803 | 19,806 | 4,800 | 0 | 1,333,863 | 24,650,852 | 24,650,852 | 0 | 100% |
| 2048 | 0 | 29 | 33,975 | 24,650,852 | 1,864,423 | 6,896 | 15,528 | 3,228 | 0 | 1,305,533 | 24,103,822 | 24,103,822 | 0 | 100% |
| 2049 | 0 | 28 | 21,971 | 24,103,822 | 1,860,320 | 6,984 | 12,533 | 2,087 | 0 | 1,275,443 | 23,526,582 | 23,526,582 | 0 | 100% |
| 2050 | 0 | 28 | 13,576 | 23,526,582 | 1,851,529 | 7,065 | 10,435 | 1,290 | 0 | 1,243,853 | 22,923,566 | 22,923,566 | 0 | 100% |
| 2051 | 0 | 27 | 8,150 | 22,923,566 | 1,838,413 | 7,138 | 9,105 | 774 | 0 | 1,210,991 | 22,298,885 | 22,298,885 | 0 | 100% |
| 2052 | 0 | 27 | 4,543 | 22,298,885 | 1,821,755 | 7,202 | 8,277 | 432 | 0 | 1,177,052 | 21,655,689 | 21,655,689 | 0 | 100% |
| 2053 | 0 | 26 | 2,097 | 21,655,689 | 1,801,920 | 7,254 | 7,737 | 199 | 0 | 1,142,192 | 20,996,643 | 20,996,643 | 0 | 100% |
| 2054 | 0 | 26 | 1,407 | 20,996,643 | 1,778,473 | 7,295 | 7,619 | 134 | 0 | 1,106,574 | 20,325,202 | 20,325,202 | 0 | 100% |
| 2055 | 0 | 25 | 571 | 20,325,202 | 1,752,735 | 7,321 | 7,453 | 54 | 0 | 1,070,336 | 19,642,989 | 19,642,989 | 0 | 100% |
| 2056 | 0 | 24 | 0 | 19,642,989 | 1,724,400 | 7,333 | 7,334 | 0 | 0 | 1,033,578 | 18,952,168 | 18,952,168 | 0 | 100% |
| 2057 | 0 | 24 | 0 | 18,952,168 | 1,693,301 | 7,329 | 7,329 | 0 | 0 | 996,427 | 18,255,293 | 18,255,293 | 0 | 100% |

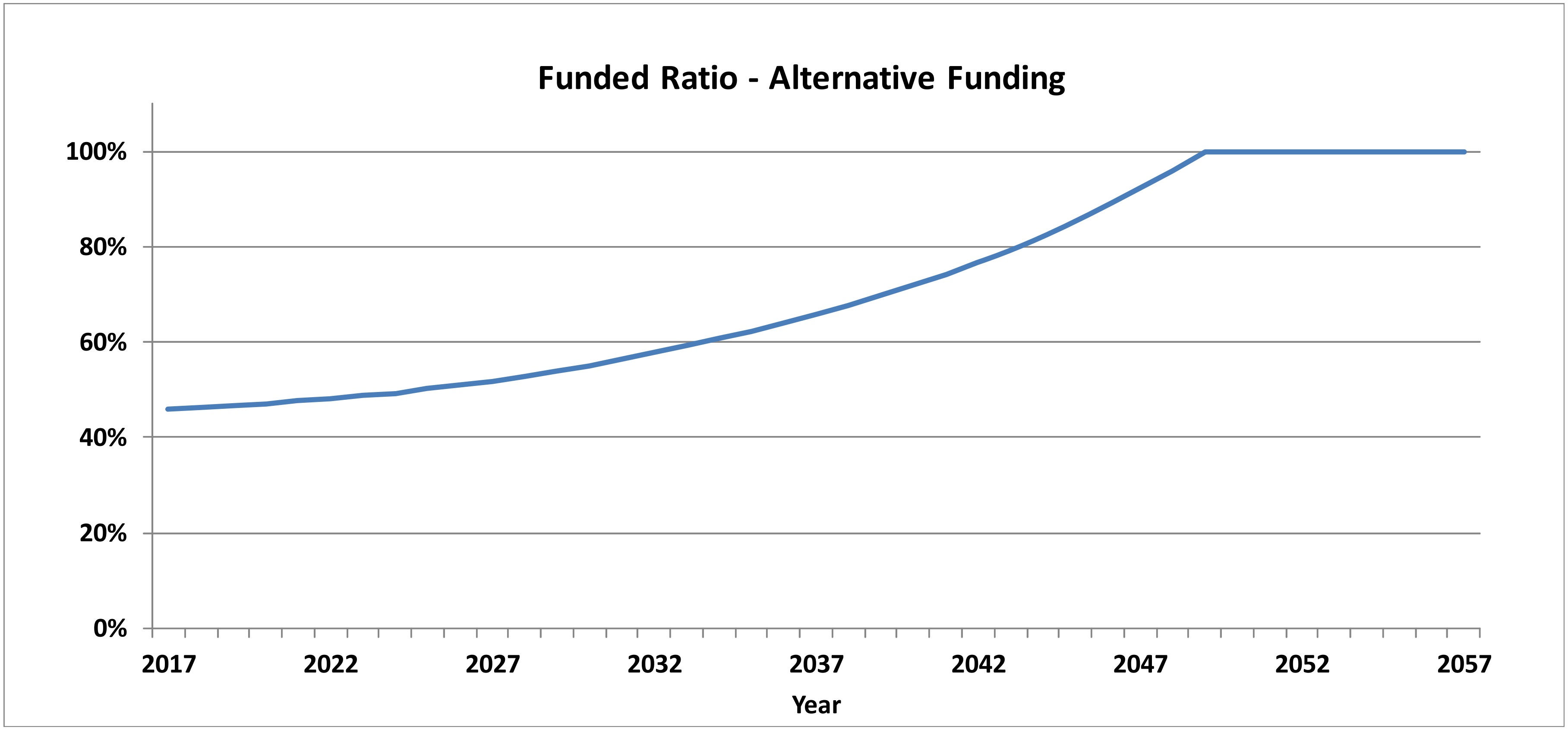
# Alternative Funding on an Open Group Basis, Table 2

| Valuation Plan Year End 30-Jun | Number | | Total Payroll | Total Assets | | | | | | | | Actuarial Accrued Liability | Unfunded Liability | Funded Ratio |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Active | Pay Status | | Assets (boy) | Benefit Payments | Expenses | Employer Contributions | Employee Contributions | Premium Tax Allocation Contributions | Investment Income | Assets (eoy) | | | |
| 2017 | 25 | 19 | $1,078,997 | $6,314,273 | $647,064 | $600 | $283,360 | $105,346 | $226,843 | $563,266 | $6,845,424 | $14,887,506 | $8,042,082 | 46% |
| 2018 | 25 | 20 | 1,133,893 | 6,845,424 | 698,459 | 4,581 | 303,196 | 107,720 | 231,517 | 374,854 | 7,159,671 | 15,471,834 | 8,312,163 | 46% |
| 2019 | 25 | 20 | 1,203,150 | 7,159,671 | 708,016 | 4,807 | 324,420 | 114,817 | 239,708 | 392,862 | 7,518,656 | 16,106,468 | 8,587,812 | 47% |
| 2020 | 25 | 21 | 1,242,956 | 7,518,656 | 742,901 | 4,979 | 347,129 | 118,583 | 250,103 | 412,656 | 7,899,248 | 16,755,436 | 8,856,188 | 47% |
| 2021 | 25 | 22 | 1,302,144 | 7,899,248 | 782,112 | 5,236 | 371,428 | 124,414 | 258,311 | 433,558 | 8,299,611 | 17,422,619 | 9,123,008 | 48% |
| 2022 | 25 | 22 | 1,353,396 | 8,299,611 | 818,133 | 5,431 | 397,428 | 129,210 | 264,875 | 455,609 | 8,723,169 | 18,110,562 | 9,387,393 | 48% |
| 2023 | 25 | 23 | 1,417,241 | 8,723,169 | 853,669 | 5,660 | 425,248 | 135,406 | 272,441 | 479,062 | 9,175,997 | 18,826,660 | 9,650,663 | 49% |
| 2024 | 25 | 23 | 1,486,942 | 9,175,997 | 877,451 | 5,852 | 455,015 | 142,055 | 279,237 | 504,490 | 9,673,492 | 19,586,861 | 9,913,369 | 49% |
| 2025 | 25 | 23 | 1,561,918 | 9,673,492 | 895,812 | 6,037 | 486,866 | 149,274 | 285,855 | 532,589 | 10,226,227 | 20,401,413 | 10,175,186 | 50% |
| 2026 | 25 | 23 | 1,641,075 | 10,226,227 | 909,456 | 6,215 | 520,947 | 156,920 | 292,336 | 563,922 | 10,844,681 | 21,280,020 | 10,435,339 | 51% |
| 2027 | 25 | 24 | 1,701,289 | 10,844,681 | 936,600 | 6,395 | 557,413 | 162,780 | 299,069 | 598,527 | 11,519,474 | 22,203,190 | 10,683,716 | 52% |
| 2028 | 25 | 24 | 1,777,871 | 11,519,474 | 970,770 | 6,652 | 596,432 | 170,400 | 308,209 | 636,219 | 12,253,312 | 23,171,932 | 10,918,620 | 53% |
| 2029 | 25 | 24 | 1,864,301 | 12,253,312 | 993,158 | 6,874 | 638,182 | 178,732 | 316,518 | 677,552 | 13,064,264 | 24,205,650 | 11,141,386 | 54% |
| 2030 | 25 | 24 | 1,955,067 | 13,064,264 | 1,012,240 | 7,084 | 682,855 | 187,488 | 324,369 | 723,293 | 13,962,946 | 25,313,560 | 11,350,614 | 55% |
| 2031 | 25 | 25 | 2,011,479 | 13,962,946 | 1,054,202 | 7,291 | 730,655 | 193,032 | 332,319 | 773,239 | 14,930,698 | 26,461,266 | 11,530,568 | 56% |
| 2032 | 25 | 26 | 2,084,046 | 14,930,698 | 1,114,255 | 7,619 | 781,801 | 200,470 | 344,021 | 826,735 | 15,961,850 | 27,637,888 | 11,676,038 | 58% |
| 2033 | 25 | 26 | 2,170,024 | 15,961,850 | 1,155,792 | 7,912 | 836,527 | 208,868 | 355,131 | 884,327 | 17,082,999 | 28,869,566 | 11,786,567 | 59% |
| 2034 | 25 | 26 | 2,250,355 | 17,082,999 | 1,197,860 | 8,188 | 895,084 | 216,706 | 365,798 | 946,932 | 18,301,471 | 30,156,760 | 11,855,289 | 61% |
| 2035 | 25 | 27 | 2,336,889 | 18,301,471 | 1,246,566 | 8,493 | 957,740 | 225,271 | 378,034 | 1,014,883 | 19,622,340 | 31,497,856 | 11,875,516 | 62% |
| 2036 | 25 | 27 | 2,427,930 | 19,622,340 | 1,293,677 | 8,795 | 1,024,782 | 234,246 | 390,328 | 1,088,640 | 21,057,865 | 32,899,689 | 11,841,824 | 64% |
| 2037 | 25 | 28 | 2,487,320 | 21,057,865 | 1,364,301 | 9,117 | 1,096,517 | 239,907 | 403,366 | 1,168,123 | 22,592,360 | 34,326,467 | 11,734,107 | 66% |
| 2038 | 25 | 29 | 2,540,344 | 22,592,360 | 1,462,196 | 9,528 | 1,173,273 | 244,385 | 419,852 | 1,252,504 | 24,210,650 | 35,747,393 | 11,536,743 | 68% |
| 2039 | 25 | 30 | 2,608,827 | 24,210,650 | 1,557,906 | 9,961 | 1,255,402 | 250,041 | 437,239 | 1,341,755 | 25,927,219 | 37,166,077 | 11,238,858 | 70% |
| 2040 | 25 | 31 | 2,666,149 | 25,927,219 | 1,660,136 | 10,383 | 1,343,280 | 254,684 | 454,573 | 1,436,362 | 27,745,600 | 38,571,866 | 10,826,266 | 72% |
| 2041 | 25 | 32 | 2,738,562 | 27,745,600 | 1,761,773 | 10,852 | 1,437,310 | 261,154 | 473,672 | 1,536,847 | 29,681,958 | 39,969,704 | 10,287,746 | 74% |
| 2042 | 25 | 32 | 2,813,489 | 29,681,958 | 1,861,606 | 11,293 | 1,537,922 | 267,682 | 492,118 | 1,644,034 | 31,750,816 | 41,365,849 | 9,615,033 | 77% |
| 2043 | 25 | 33 | 2,913,616 | 31,750,816 | 1,952,708 | 11,764 | 1,645,577 | 276,662 | 511,560 | 1,759,029 | 33,979,172 | 42,779,411 | 8,800,239 | 79% |
| 2044 | 25 | 33 | 3,020,012 | 33,979,172 | 2,027,994 | 12,201 | 1,760,767 | 286,379 | 530,174 | 1,883,427 | 36,399,725 | 44,228,273 | 7,828,548 | 82% |
| 2045 | 25 | 34 | 3,127,042 | 36,399,725 | 2,110,520 | 12,645 | 1,884,021 | 296,198 | 548,942 | 2,018,426 | 39,024,147 | 45,710,153 | 6,686,006 | 85% |
| 2046 | 25 | 34 | 3,246,485 | 39,024,147 | 2,191,060 | 13,107 | 2,015,902 | 307,118 | 568,502 | 2,164,977 | 41,876,480 | 47,233,945 | 5,357,465 | 89% |
| 2047 | 25 | 35 | 3,372,220 | 41,876,480 | 2,265,049 | 13,561 | 2,157,015 | 318,468 | 587,943 | 2,324,500 | 44,985,796 | 48,810,617 | 3,824,821 | 92% |
| 2048 | 25 | 35 | 3,501,387 | 44,985,796 | 2,340,095 | 14,024 | 2,308,006 | 330,481 | 607,887 | 2,498,428 | 48,376,479 | 50,442,471 | 2,065,992 | 96% |
| 2049 | 25 | 35 | 3,638,881 | 48,376,479 | 2,417,811 | 14,498 | 2,469,566 | 343,752 | 628,376 | 2,688,093 | 52,073,957 | 52,136,041 | 62,084 | 100% |
| 2050 | 25 | 36 | 3,784,350 | 52,073,957 | 2,496,126 | 14,973 | 1,123,449 | 357,697 | 19,885 | 2,836,663 | 53,900,552 | 53,900,552 | 0 | 100% |
| 2051 | 25 | 36 | 3,936,925 | 53,900,552 | 2,572,317 | 15,448 | 1,126,090 | 371,795 | 0 | 2,934,959 | 55,745,632 | 55,745,632 | 0 | 100% |
| 2052 | 25 | 36 | 4,091,362 | 55,745,632 | 2,646,452 | 15,927 | 1,168,253 | 386,076 | 0 | 3,035,946 | 57,673,529 | 57,673,529 | 0 | 100% |
| 2053 | 25 | 36 | 4,253,339 | 57,673,529 | 2,723,567 | 16,422 | 1,211,866 | 401,550 | 0 | 3,141,478 | 59,688,434 | 59,688,434 | 0 | 100% |
| 2054 | 25 | 36 | 4,423,097 | 59,688,434 | 2,803,358 | 16,919 | 1,260,652 | 417,730 | 0 | 3,251,882 | 61,798,421 | 61,798,421 | 0 | 100% |
| 2055 | 25 | 36 | 4,599,049 | 61,798,421 | 2,884,224 | 17,418 | 1,311,102 | 434,256 | 0 | 3,367,541 | 64,009,678 | 64,009,678 | 0 | 100% |
| 2056 | 25 | 36 | 4,780,736 | 64,009,678 | 2,966,296 | 17,923 | 1,361,735 | 451,072 | 0 | 3,488,750 | 66,327,016 | 66,327,016 | 0 | 100% |
| 2057 | 25 | 37 | 4,966,866 | 66,327,016 | 3,051,242 | 18,434 | 1,412,877 | 468,022 | 0 | 3,615,732 | 68,753,971 | 68,753,971 | 0 | 100% |

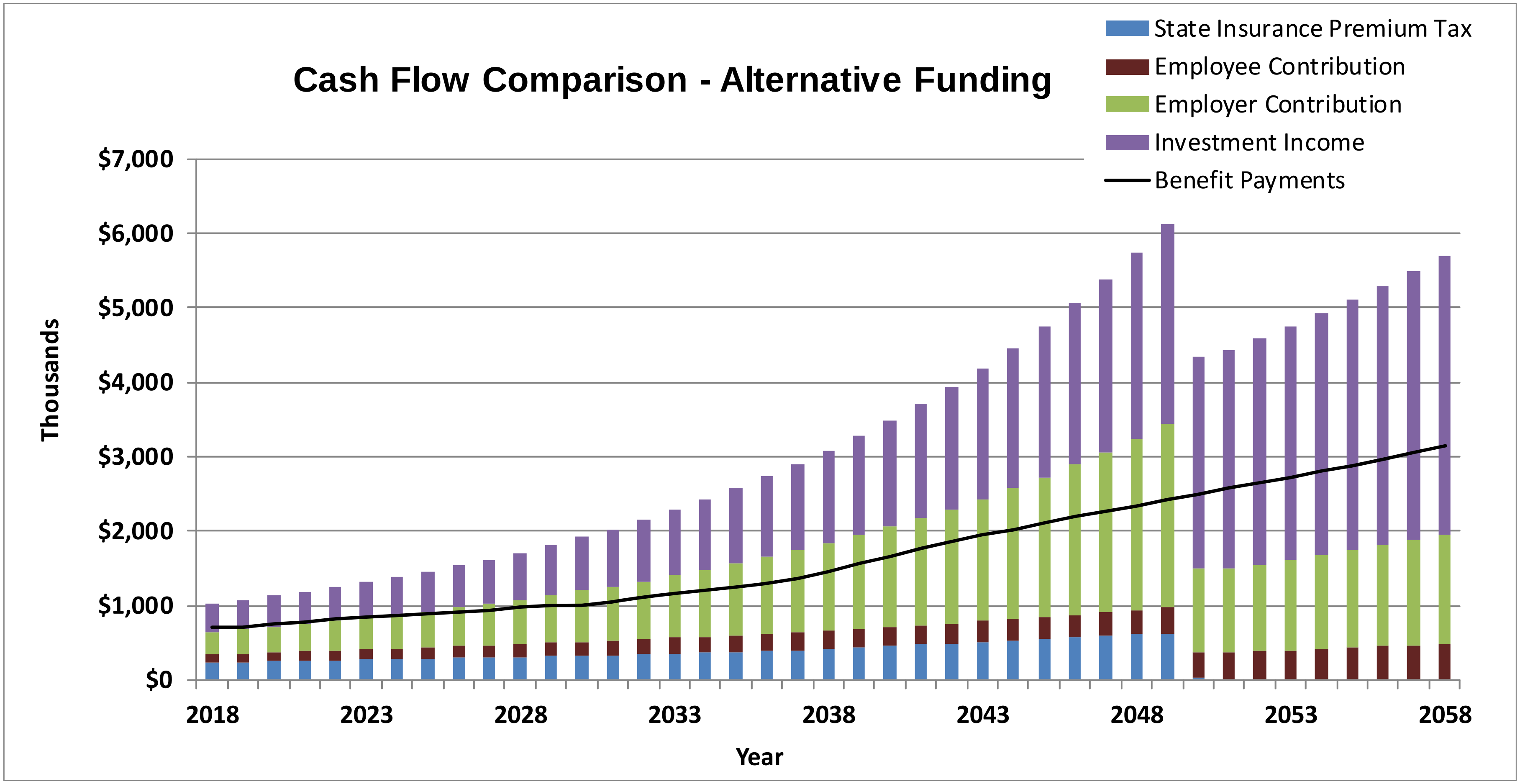
# Open Group Actuarial Projections – Alternative Funding, Graph 2



# Open Group Actuarial Projections – Alternative Funding, Graph 3



# Open Group Actuarial Projections – Alternative Funding, Graph 4



# SECTION III

## FUNDING POLICY CHOICES

# Actuarial Projections –Alternative/Optional/Conservation Funding

**Funding Policy Choices**

West Virginia Code §8-22-20 allows a municipality's governing body (City Council) the choice of changing from the Alternative funding policy to either the Optional funding policy or the Conservation funding policy. The Optional funding policy is defined in West Virginia Code §8-22-20(e)(1), and is effective for plan years beginning after January 1, 2010. The Conservation funding policy is defined in West Virginia Code §8-22-20(f)(1), and is effective for plan years beginning after April 1, 2011.

If the City Council elects either the Optional funding policy or the Conservation funding policy, the existing local Plan is closed, and new employees are covered in the multiple employer statewide plan - *Municipal Police Officers and Firefighters Retirement System.* Contributions to the statewide plan include:

- Employer contributions from 8.5% to 10.5% of pay. Currently, Employers contribute 8.5% of pay.

- Employee contributions of 8.5% of pay.

If the City Council elects the Optional funding policy, contributions to the closed local Plan include:

- Employer contributions equal to the normal cost, net of employee contributions, plus a 40-year closed period amortization from January 1, 2010, on a level dollar basis, of the unfunded actuarial accrued liability net of premium tax allocation applicable to the plan year.

- Employee contributions of 7% of pay if hired before January 1, 2010, which may be increased by up to 2.5% of pay if elected by the Board of trustees of the Plan. Employees hired after January 1, 2010, contribute 9.50% of pay.

- The premium tax allocation assigned to the Fund for the plan year.

If the City Council elects the Conservation funding policy, contributions to the closed local Plan are made to two asset accounts as follows:

- The first asset account (Benefit Payment Account) is used to finance benefits and expenses for the fiscal year on a pay-as-you-go basis. Sources to pay current year benefits and expenses include active member employee contributions of 8.0% (which is the current contribution rate of 9.5% of pay, less 1.5% which by law goes into the accumulation account), a portion of the premium tax allocation not assigned to the accumulation account as defined below, and employer contributions.

- The second account (Accumulation Account) cannot be used to pay benefits and expenses until assets exceed actuarial accrued liabilities. Contributions to the accumulation account include employee contributions of 1.5% of pay and a percentage of the premium tax allocation. The percentage of premium tax allocation is based on the amounts needed to produce 100% funding of liabilities in 35 years, from adoption, considering assets from both the benefit payment account and the accumulation account. This account also includes the Fund's assets prior to the adoption of Conservation funding policy.

# Actuarial Projections –Alternative/Optional/Conservation Funding (Continued)

For purposes of evaluating the implication of selecting either the Optional funding policy or the Conservation funding policy, we have generated actuarial projections under the following two illustrative scenarios.

- Scenario I – The sponsor elects either the Optional funding policy or Conservation funding policy during fiscal year end June 30, 2019, and makes the newly elected contribution in fiscal year end June 30, 2019.

- Scenario II – The sponsor elects either the Optional funding policy or the Conservation funding policy at some future date when/if contributions are projected to be less than under the current Alternative funding policy.

It is important to note that the plan sponsor can make only one election to either the Optional funding policy or the Conservation funding policy, and that the election is irrevocable. The projections assume employer contributions of 10.5% of pay for future members covered under the statewide plan.

**Scenario I – Sponsor Immediately Elects either the Optional or Conservation Funding Policy**

The following table shows the employer contribution for the fiscal year end June 30, 2019, if the sponsor elects either the Optional or Conservation funding policy in fiscal year end June 30, 2019:

| Total Employer Contributions for FYE June 30, 2019 | | | | |
|---|---|---|---|---|
| | Local Plan | | Statewide Plan | |
| **Funding Method** | **Amount** | **Percent of Pay** | **Amount** | **Percent of Pay** |
| Alternative | $324,420 | 27.0% | NA | NA |
| Optional | $649,140 | 57.2% | $7,118 | 10.5% |
| Conservation | $382,073 | 33.7% | $7,118 | 10.5% |

Graphs I(1), I(2), and I(3) on the following pages show the projected contribution and funded ratio pattern of the three separate funding policies. If the sponsor continues to make contributions under the Alternative policy, employer contributions are projected to increase from $303,196 in fiscal year end 2018 to $2,469,566 in fiscal year end 2049. In fiscal year end 2050, the plan is projected to be 100% funded.

If the Optional funding policy is selected in fiscal year end 2019, employer contributions to the local plan for fiscal year end 2019 are projected to increase from $324,420 to $649,140. However, over the 40-year projection period, total employer contributions to both the local plan and the statewide plan are projected to decrease from $656,258 in fiscal year end 2019 to $395,309 in fiscal year end 2049, and the Plan is projected to be fully funded in 2049.

# Actuarial Projections –Alternative/Optional/Conservation Funding (Continued)

If the Conservation funding policy is selected in fiscal year end 2019, employer contributions to the local plan for fiscal year end 2019 are projected to increase from $324,420 to $382,073. During the 35-year projection period, total employer contributions to both the local plan and the statewide plan are projected to increase from $389,191 in fiscal year end 2019 to $1,485,204 in fiscal year end 2042 and the Plan is projected to be fully funded in 2043.

The Optional funding policy is consistent with actuarial standards of practice and produces a relatively stable dollar contribution pattern and reasonable growth in the funded ratio.

The Conservation funding policy produces a less stable contribution pattern and slower growth in the funded ratio when compared to the Optional funding policy. The projections of employer contributions under the Conservation funding policy are dependent on the expected number of retirements, disabilities, and resulting benefit payments. Actual experience could produce a significantly higher number of retirements, disabilities, and benefit payments, which would increase the employer's required contribution under the Conservation funding policy. Unlike the Optional funding policy, the Conservation funding policy does not have a built-in feature to smooth out emerging gains and losses.

The Alternative funding policy produces a lower funded ratio when compared to either the Optional funding policy or the Conservation funding policy, and the 7% annual increases in employer contributions may eventually be cost prohibitive.

The details of the Optional and Conservation funding policy projections can be found in the Appendix. The details of the Alternative funding policy projection were presented in Section II.

**Scenario II – Sponsor Elects Optional or Conservation Policy if/when Contributions are Lower**

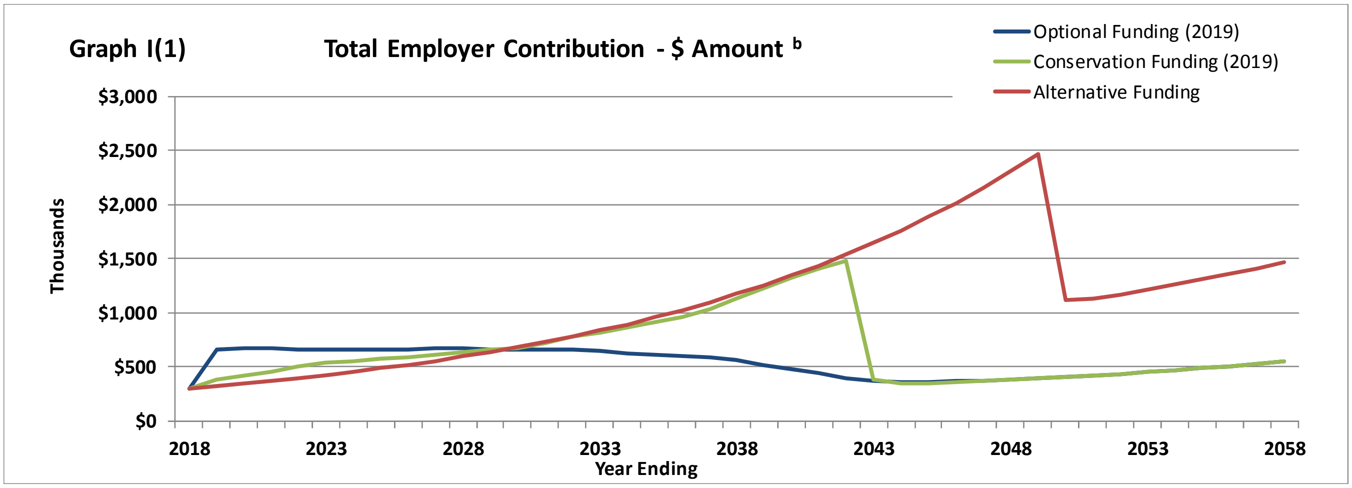
Under Scenario II, the plan sponsor is assumed to make contributions under the Alternative funding policy in future years, until the first year that either the Optional or Conservation policy produces a lower contribution. Under this assumption, in plan year end 2047, the employer contributions under the Optional funding policy of $2,083,917 are projected to be lower than contributions under the Alternative funding policy of $2,157,015. Similarly, in plan year end 2026, the employer contributions under the Conservation funding policy of $495,561 are projected to be lower than contributions under the Alternative funding policy of $520,947.

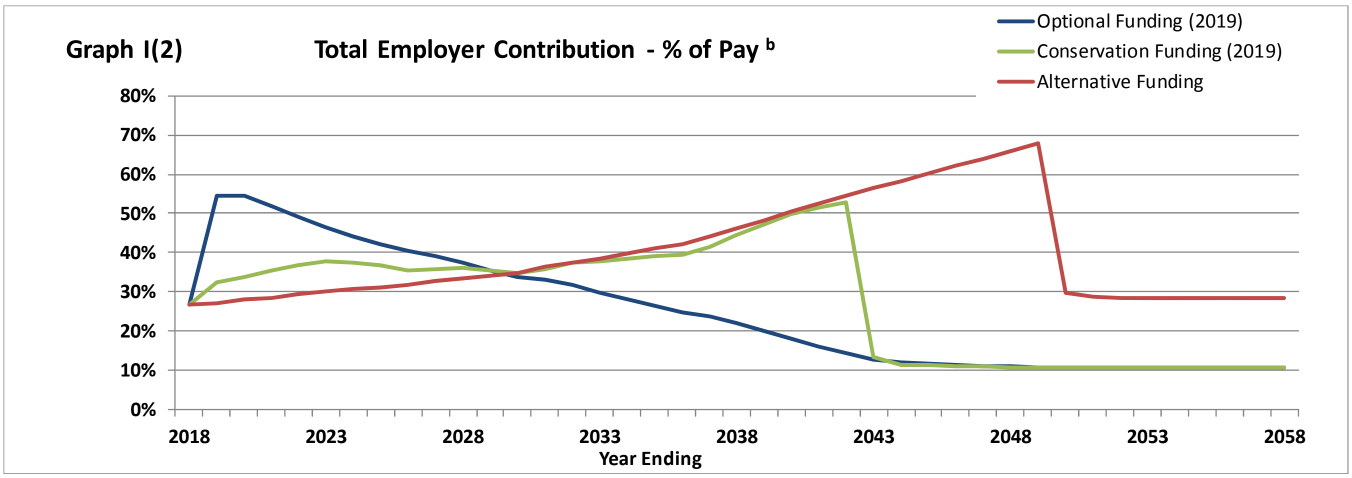
Graphs II(1), II(2), and III(3) show the projected contribution pattern and funded ratio. Based on these projections, electing the Optional funding policy in 2047 appears to produce a relatively stable and actuarially sound contribution pattern as compared to either the Alternative funding policy or the Conservation funding policy. The Conservation funding policy has lower projected employer contributions than the Alternative funding policy beginning in 2026. After 2026, the funded ratio under the Conservation funding policy increases at a similar rate to the Alternative funding policy. As stated above, however, the Conservation funding policy is dependent on expected benefits payments when considering the *expected number of retirement and disabilities.* The ultimate employer contributions depend on the *actual number of retirement and disabilities*, which could result in a more volatile contribution pattern when compared to the Optional funding policy.

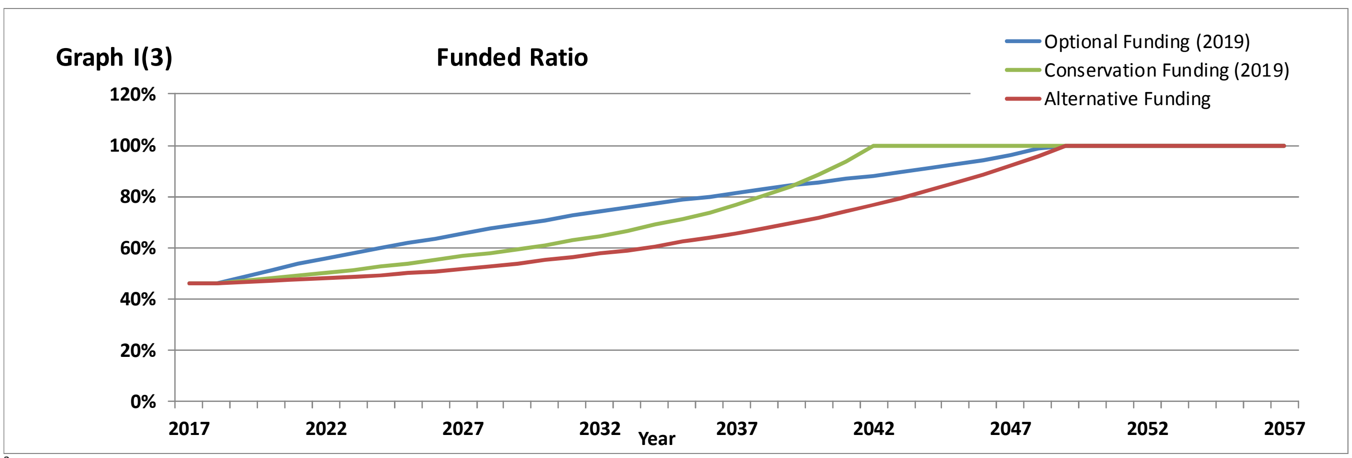
The details of the Scenario II projections can be found in the Appendix.

# Actuarial Projections –Alternative/Optional/Conservation Funding [a] (Continued)

## Scenario I



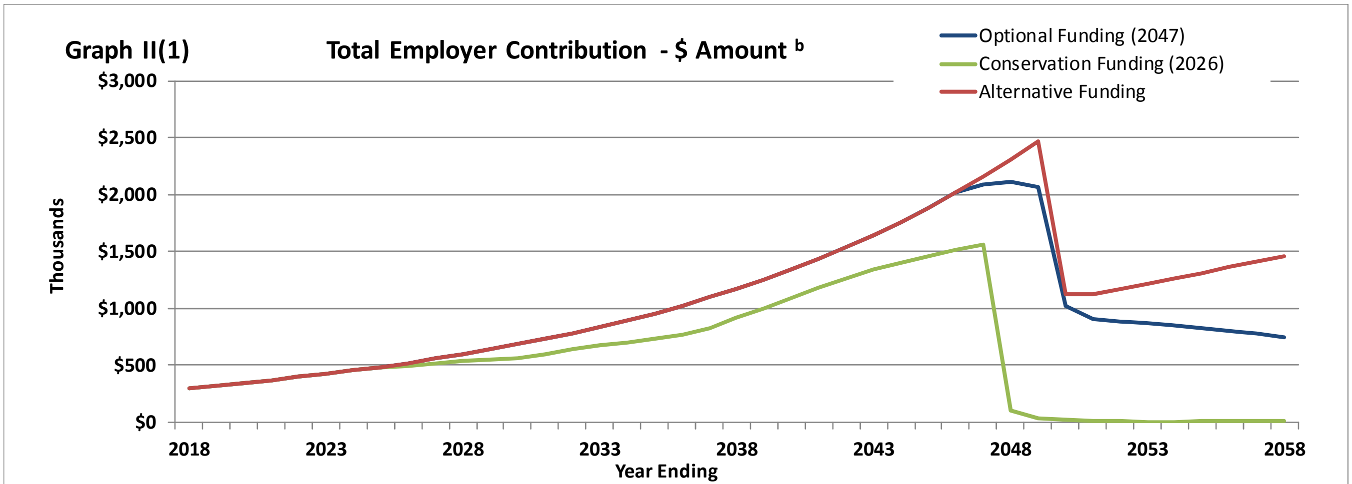



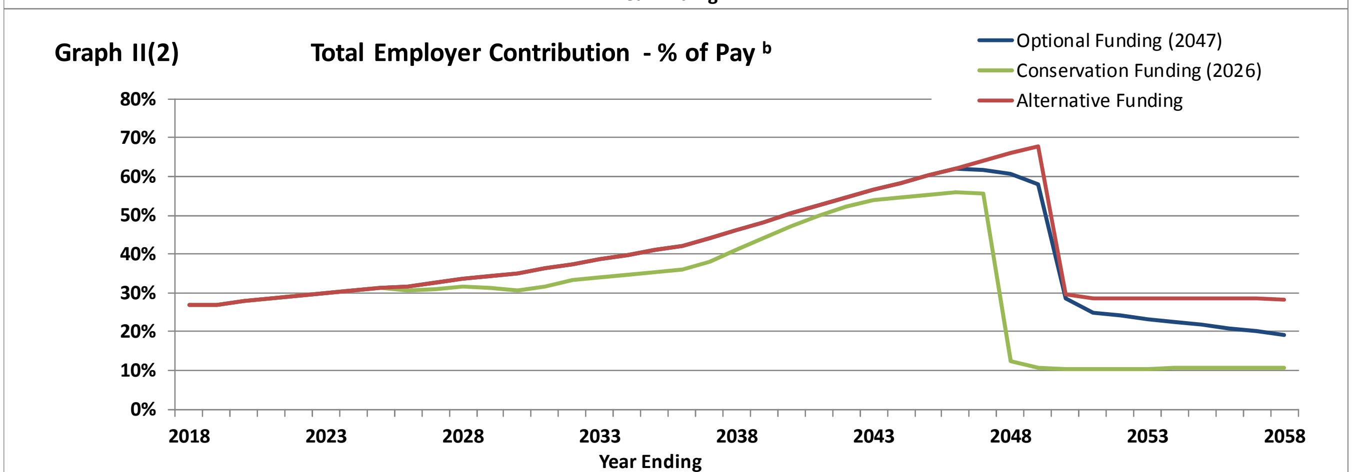



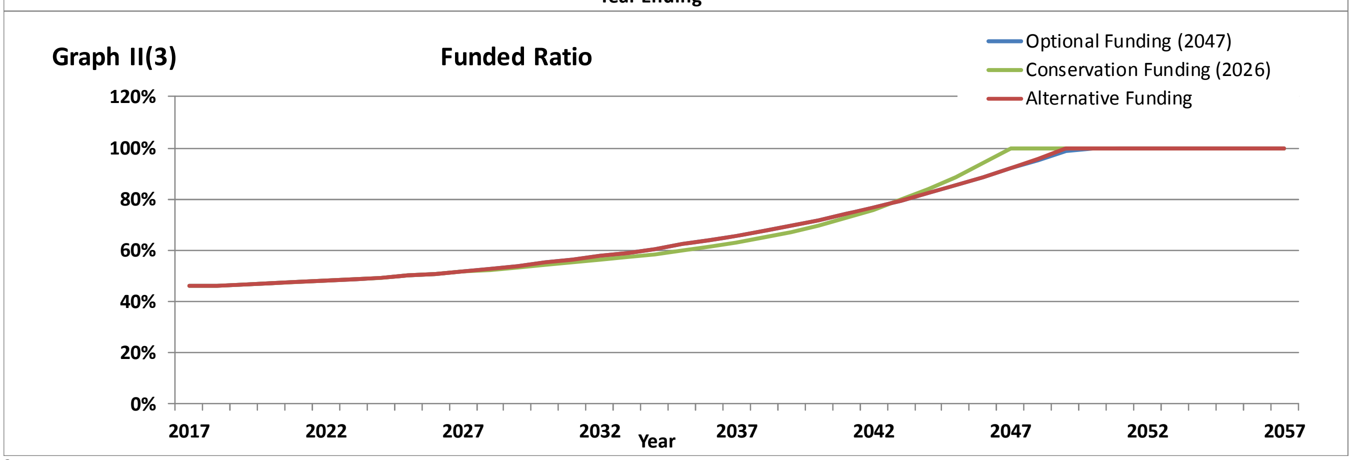

[a] *Assumes Sponsor elects either the Optional funding policy or Conservation funding policy in fiscal year end June 30, 2019, and makes the newly elected contribution in fiscal year end June 30, 2019.*
[b] *Based on total pay and includes contributions for future members projected to participate in the statewide plan.*

# Actuarial Projections –Alternative/Optional/Conservation Funding [a] (Continued)

## Scenario II




[a] *Assumes Sponsor elects either the Optional funding policy or Conservation funding policy in the first year that contributions are lower than under the Alternative funding policy.*
[b] *Based on total pay and includes contributions for future members projected to participate in the statewide plan.*

# SECTION IV

## ACTUARIALLY DETERMINED CONTRIBUTION FOR GASB STATEMENT NOS. 67 AND 68 REPORTING

# Actuarially Determined Contribution for GASB Statement Nos. 67 and 68 Reporting
# Schedule C: Funding Progress and Employer Contributions

| | | |
|---|---|---|
| Valuation Date | **July 1, 2016** | **July 1, 2017** |
| Valuation Interest Rate | 5.50% | 5.50% |
| Cost-of-Living Adjustment | 2.75% | 2.75% |
| Wage Inflation | 3.75% | 3.75% |
| Actuarial Value of Assets | Market | Market |
| Actuarial Cost Method | Entry Age Normal | Entry Age Normal |
| Remaining Amortization Period [a] | 24 Years, Level % of Pay | 23 Years, Level % of Pay |
| **Schedule of Funding Progress** | | |
| Actuarial Valuation Date | **July 1, 2016** | **July 1, 2017** |
| 1. Market Value of Assets | $6,314,273 | $6,845,424 |
| 2. Actuarial Accrued Liability | $14,360,270 | $14,887,506 |
| 3. Unfunded Actuarial Accrued Liability (2 - 1) | $8,045,997 | $8,042,082 |
| 4. Funded Ratio (1/2) | 44% | 46% |
| 5. Expected Payroll | $1,078,997 | $1,133,893 |
| 6. UAAL as Percentage of Covered Payroll (3/5) | 746% | 709% |
| **Schedule of Employer Contributions** [c] | **FYE 2017** | **FYE 2018** |
| 1. Actuarially Determined Contribution | | |
| (a) Employer Normal Cost | $339,958 | $366,550 |
| (b) Amortization of Unfunded Actuarial Accrued Liability | $403,647 | $417,714 |
| (c) Actuarially Determined Contribution (ADC) (a + b) | $743,605 | $784,264 |
| 2. Employer Contribution [b] | $283,360 | $303,196 |
| 3. Premium Tax Allocation | $226,843 | $231,517 |
| 4. Percentage of ADC Contributed [ (2 + 3)/1(c)] | 69% | 68% |

[a] *Suggested amortization policy to comply with GASB Statement Nos. 67 and 68 Standards.*
[b] *Estimated employer contribution for fiscal year end June 30, 2018.*
[c] *The Alternative minimum contribution plus the premium tax allocation does not satisfy the Actuarially Determined Contribution as defined by GASB Statement Nos. 67 and 68.*

# Section V

## Actuarial Valuation Data as of July 1, 2017

# Actuarial Valuation Data as of July 1, 2017
## Schedule D: Reconciliation of Assets

| **Plan Year Ending** | **June 30, 2016** | **June 30, 2017** |
|---|---|---|
| A. Market Value of Assets Beginning of Year | $6,397,155 | $6,314,273 |
| Adjustment to Market Value of Assets at Beginning of Year | $0 | $0 |
| Market Value of Assets Beginning of Year | $6,397,155 | $6,314,273 |
| 1. Revenue During Fiscal Year | | |
| (a) Employee Contribution | $116,759 | $105,346 |
| (b) Governmental Contribution | | |
| (i) From Local Government | $264,823 | $283,360 |
| (ii) From State Government | $209,287 | $226,843 |
| (iii) Reallocation from State Government | $0 | $0 |
| (iv) Total | $474,110 | $510,203 |
| (c) Earnings on Investments | | |
| (i) Net Appreciation/(Depreciation) | ($243,147) | $421,994 |
| (ii) Bond Interest | $41,840 | $40,862 |
| (iii) Dividends | $93,622 | $72,905 |
| (iv) Net Realized Gain (Loss) on Sale/Exchange | $8,419 | $72,597 |
| (v) Other | $0 | $0 |
| (vi) Less Investment Expense | ($48,661) | ($45,092) |
| (vii) Total | ($147,927) | $563,266 |
| (d) Other Revenue | $0 | $0 |
| (e) Net Receivable Investment Income | $0 | $0 |
| (f) Receivable Contribution [a] | | |
| (i) From Employee Contributions | $0 | $0 |
| (ii) From Local Government | $0 | $0 |
| (iii) From State Government | $0 | $0 |
| (iv) Total | $0 | $0 |
| (g) Total Revenue (sum of (a) through (f)) | $442,942 | $1,178,815 |
| 2. Expenditures During Fiscal Year | | |
| (a) Benefits Paid | $525,224 | $637,013 |
| (b) Withdrawals | $0 | $10,051 |
| (c) Administrative Expenses | $600 | $600 |
| (d) Payable Benefits and Withdrawals | $0 | $0 |
| (e) Payable Administrative Expenses | $0 | $0 |
| (f) Total Expenditures (sum of (a) through (e)) | $525,824 | $647,664 |
| B. Market Value of Assets End of Year [A + 1(g) - 2(f)] | $6,314,273 | $6,845,424 |
| C. Approximate Return on Assets | (2.31)% | 8.93% |

[a] *Receivable contributions for each respective plan year ending.*

# Actuarial Valuation Data as of July 1, 2017
## Schedule E: Assets Held by Category

| Plan Year Ending | June 30, 2016 | | June 30, 2017 | |
|---|---|---|---|---|
| 1. Cash and Short-term Investments | $708,138 | 11% | $863,637 | 13% |
| 2. Government Securities | | | | |
| (a) US Treasury Bills, Notes and Bonds | $564,965 | | $437,430 | |
| (b) US State and Local Governmental Debt Securities | $0 | | $686,763 | |
| (c) Foreign Governmental Debt Securities | $0 | | $0 | |
| (d) Other | $0 | | $0 | |
| (e) Total Government Securities (sum of (a) through (d) ) | $564,965 | 9% | $1,124,193 | 16% |
| 3. Corporate Fixed Income | | | | |
| (a) US Bonds | $640,897 | | $0 | |
| (b) US Mortgage or other Asset Backed Securities | $0 | | $0 | |
| (c) US Mutual Fund Shares (Bonds) | $0 | | $466,415 | |
| (d) US Exchange Traded Funds (Bonds) | $0 | | $0 | |
| (e) International Bonds | $0 | | $0 | |
| (f) International Mutual Fund Shares (Bonds) | $0 | | $0 | |
| (g) International Exchange Traded Funds (Bonds) | $0 | | $0 | |
| (h) Total Corporate Fixed Income (sum of (a) through (g) ) | $640,897 | 10% | $466,415 | 7% |
| 4. Corporate Equity | | | | |
| (a) US Equity | $736,833 | | $232,756 | |
| (b) US Mutual Fund Shares (Equity) | $0 | | $0 | |
| (c) US Exchange Traded Funds (Equity) | $1,525,208 | | $1,751,089 | |
| (d) International Equity | $1,207,484 | | $1,384,442 | |
| (e) International Mutual Fund Shares (Equity) | $0 | | $0 | |
| (f) International Exchange Traded Funds (Equity) | $0 | | $18,648 | |
| (g) Total Corporate Equity (sum of (a) through (f) ) | $3,469,525 | 55% | $3,386,935 | 49% |
| 5. Alternative Investments | | | | |
| (a) Real Estate Investment Trust | $0 | | $0 | |
| (b) Private Equity Fund | $0 | | $0 | |
| (c) Hedge Funds | $0 | | $0 | |
| (d) Other Alternative Investments | $930,748 | | $1,004,244 | |
| (e) Total Alternative Investments (sum of (a) through (d) ) | $930,748 | 15% | $1,004,244 | 15% |
| 6. Other | $0 | 0% | $0 | 0% |
| 7. Receivable Contributions | $0 | | | |
| (a) From Employee Contributions | $0 | | $0 | |
| (b) From Local Government | $0 | | $0 | |
| (c) From State Government | $0 | | $0 | |
| (d) Total Receivable Contributions (sum of (a) through (c) ) | $0 | 0% | $0 | 0% |
| 8. Accruals | | | | |
| (a) Receivable (other than State and Local Contributions) | $0 | | $0 | |
| (b) Less Payable | $0 | | $0 | |
| (c) Total | $0 | 0% | $0 | 0% |
| **Market Value of Assets End of Year [ sum of (1) through (8) ]** | **$6,314,273** | | **$6,845,424** | |

# Actuarial Valuation Data as of July 1, 2017
## Schedule F: Summary of Participant Activity

| | Actives | Retirees | Disabled | Deferred Vested | Spouses and Beneficiaries | Totals |
|---|---|---|---|---|---|---|
| **Total Participants July 1, 2016:** | **24** | **14** | **1** | **0** | **3** | **42** |
| New Actives: | 3 | | | | | **3** |
| Returned to Actives Status: | | | | | | **0** |
| Data Corrections/Other Changes: | 1 | | | | | **1** |
| Vested Terminations: | | | | | | **0** |
| Non-Vested Terminations: | (2) | | | | | **(2)** |
| Disabled: | | | | | | **0** |
| Retirements: | (1) | 1 | | | | **0** |
| Deaths with Beneficiary: | | | | | | **0** |
| Deaths w/o Beneficiary: | | | | | | **0** |
| Expired Annuity or Stop Payment: | | | | | | **0** |
| Net Changes: | 1 | 1 | 0 | 0 | 0 | **2** |
| **Total Participants June 30, 2017:** | **25** | **15** | **1** | **0** | **3** | **44** |

# Actuarial Valuation Data as of July 1, 2017
## Schedule G: Distribution of Active Employees by Age and Length of Service

| Attained | Years of Service to Valuation Date | | | | | | | | | | Valuation |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Age | Less than 1 | 1-4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30-34 | Over 35 | Totals | Payroll[a] |
| Under 20 | | | | | | | | | | | $ 0 |
| 20-24 | | 1 | | | | | | | | 1 | $ 35,459 |
| 25-29 | 1 | 4 | 2 | | | | | | | 7 | $ 285,336 |
| 30-34 | 1 | 4 | | | | | | | | 5 | $ 208,383 |
| 35-39 | 1 | | 2 | 1 | | | | | | 4 | $ 200,684 |
| 40-44 | | | 1 | 2 | | | | | | 3 | $ 134,878 |
| 45-49 | | | | | 1 | 3 | 1 | | | 5 | $ 270,811 |
| 50-54 | | | | | | | | | | | $ 0 |
| 55-59 | | | | | | | | | | | $ 0 |
| 60-64 | | | | | | | | | | | $ 0 |
| 65-69 | | | | | | | | | | | $ 0 |
| Over 70 | | | | | | | | | | | $ 0 |
| Totals | **3** | **9** | **5** | **3** | **1** | **3** | **1** | **0** | **0** | **25** | **$ 1,135,552** |

**Averages**

| | | |
|---|---|---|
| Age: | 35.5 | years |
| Service: | 7.9 | years |
| Annual Pay: | $45,422 | [a] |

[a] *Based on payroll at beginning of plan year.*

# Actuarial Valuation Data as of July 1, 2017
# Schedule H: Participants Summary

| Active Participants | July 1, 2016 | July 1, 2017 |
|---|---|---|
| Number of Actives | 24 | 25 |
| Total Annual Pay | $1,077,233 | $1,135,552 |
| Average Age | 35.4 | 35.5 |
| Average Service | 8.6 | 7.9 |

| Inactive Participants | July 1, 2016 | | July 1, 2017[a] | |
|---|---|---|---|---|
| Type | No. | Annual Benefit | No. | Annual Benefit |
| Retirees | 14 | $521,251 | 15 | $569,984 |
| Survivors | 3 | $52,480 | 3 | $53,348 |
| Disabled Members | 1 | $28,926 | 1 | $28,926 |
| Deferred Vested Members | 0 | $0 | 0 | $0 |

[a]*Data provided includes 6 non-vested members with accumulated contributions balances of $17,326.*

# SECTION VI

## ACTUARIAL ASSUMPTIONS AND METHODS

**Discount Rate**

The following table outlines the factors used to determine the discount rate:

| Funded Ratio as of Valuation Date [1] | Liquidity Ratio [2] | Equity Exposure [3] | Projected Funded Ratio after 15 Years [1] | Discount Rate |
|---|---|---|---|---|
| 60% or more | 10 | 50% or more | 70% or more | 6.5% |
| 40% or more | 8 | 40% or more | 60% or more | 6.0% |
| 30% or more | 6 | 30% or more | 50% or more | 5.5% |
| 15% or more | 4 | n/a | 40% or more | 5.0% |
| Less than 15% | n/a | n/a | 15% or more | 4.5% |
| Less than 15% | n/a | n/a | Less than 15% | 4.0% |

[1] Funded ratios based on a 6.0% investment return assumption for plans using an actuarially sound policy (standard or optional) and a 5.5% investment return assumption for other plans (alternative or conservation).
[2] Liquidity ratio equals assets as of the actuarial valuation date divided by expected benefit payments for the year.
[3] Based on investment policy.

| As of June 30, 2017 | |
|---|---|
| Assets | $6,845,424 |
| Liabilities using a 5.50% discount rate | $14,887,506 |
| Funded Ratio | 46% |
| Expected Benefit Payments | $698,459 |
| Liquidity Ratio | 9.80 |
| Equity Exposure | 49% |
| Projected Funded Ratio after 15 years | 58% |

| | |
|---|---|
| Discount Rate | 5.50% |

**The premium tax allocation is projected using the following methodology:**

(1) The Base Allocation for all Pension and Relief Funds is a fixed amount equal to $8,709,689 in all future years. This amount is allocated to each individual Pension and Relief Fund in proportion to the number of eligible members, which includes active members covered in either the Pension and Relief Fund or the statewide plan, Municipal Police Officers and Firefighters Retirement System ("MPFRS").

(2) The Excess Allocation is equal to the excess of the current year premium tax assigned to all Pension and Relief Funds over the total Base Allocation. This amount is allocated to each individual Pension and Relief Fund in proportion to the number of eligible active and retired members covered in either the Pension and Relief Fund or the MPFRS.

(3) We have assumed all Pension and Relief Funds will make the minimum statutory contribution requirement and will receive 100% of both the Base Allocation and the Excess Allocation assigned to the individual plan. Consequently, the projections do not include any reallocation of Expired Premium Tax Allocation for plan years beginning on and after July 1, 2019.

(4) The total available premium tax allocation, net of expenses, as of September 1, 2018, includes a Base Allocation of $8,709,689, an Excess Allocation of $9,570,473, and an Expired Premium Tax Allocation of $237,031.

(5) For the plan year ending June 30, 2018, all Pension and Relief Funds reported a total of 1,717 eligible active members and 2,165 eligible retired members. The City of St. Albans Policemen's Pension and Relief Fund reported 25 eligible active members and 20 eligible retired members, based on the average number of plan participants for the 12-month period ending June 30, 2018. The Fund is eligible to receive a premium tax allocation of $239,708 for the fiscal year ending June 30, 2019.

(6) The total premium tax allocation was assumed to increase by 2.75% in calendar years ending on and after 2019.

# Actuarial Assumptions and Methods
# Used in the Valuation as of July 1, 2017 (Continued)

| | |
|---|---|
| General Inflation | 2.75% |
| Expected Salary Increase<br><br><br><br><br>Service-based Increase: | General Inflation:<br>2.75% *plus*<br><br>Wage Inflation Increment:<br>1.00% *plus*<br><br>Years of Service / Increase<br>1 — 20.00%<br>2 — 6.50%<br>3 — 3.50%<br>4 — 2.75%<br>5-9 — 2.50%<br>10-29 — 2.00%<br>30-34 — 1.25%<br>after 34 years of service — 0.00% |
| Post-retirement COLA | 2.75% on first $15,000 of Annual Benefit and on the accumulated supplemental pension amounts for prior years. Assumed to be payable to all members receiving payments. |
| Increase in State Insurance Premium Tax Allocation | 2.75% on and after year 1 |
| Cost Method | Entry-Age-Normal, Level-Percentage-of-Pay |
| *Amortization Policies:* | |
| Alternative Plans and former Alternative Plans that selected the Conservation Policy | For GASB 67/68 Accounting: 30 – Year Closed Level-Percentage-of-Pay Amortization (from July 1, 2010 – 23 years remaining as of July 1, 2017). |
| Standard Plans and former Standard Plans that selected the Optional Policy | For funding and GASB 67/68 Accounting: 40-Year Closed Level-Dollar Amortization (from July 1, 1991 – 14 years remaining as of July 1, 2017) |
| Former Alternative Plans that selected the Optional Policy | For funding: 40-Year Closed Level-Dollar Amortization (from January 1, 2010 – 32.5 years remaining as of July 1, 2017). For GASB 67/68 Accounting: 30-Year Closed Level-Percentage-of-Pay Amortization (from July 1, 2010 – 23 years remaining as of July 1, 2017) |

| Asset Method | Market Value |
|---|---|
| Turnover | Sample Rates –<br>Age / Rates<br>25 / 9%<br>35 / 4%<br>45 / 2%<br>50 / 0% |
| Retirement | Age / Rates[a]<br>50 / 45%<br>51-55 / 30%<br>56-59 / 35%<br>60 / 100%<br>[a]*Terminated vested participants are assumed to retire at age 50.* |
| Mortality | Active:<br>RP-2014 Blue Collar Healthy Employee[b]<br><br>Post-Retirement:<br>RP-2014 Blue Collar Healthy Annuitant<br><br>Disabled:<br>RP-2014 Blue Collar Healthy Annuitant set forward four years<br><br>Tables above incorporate generational mortality improvement using MP-2014 2-dimensional mortality improvement scales<br>[b]*Assumes 10% of deaths are duty-related and 90% are non-duty related.* |
| Disability | Sample Rates –<br>Age / Rates[c]<br>30 / 0.22%<br>40 / 0.50%<br>50 / 0.79%<br>[c] *Assumes 60% duty related and 40% non-duty related. Also assumes 10% of non-duty disabled members receive a 20% reduction in benefits due to gainful employment.* |
| Percent Married | 90% |
| Spouse Age | Females 3 years younger than males |

| | |
|---|---|
| Administrative Expenses | Administrative expenses used are equal to 0.25% of expected pay plus 0.25% of expected benefits. Future expenses assumed to increase by the general inflation assumption. |
| Refunds Paid | Assumes non-vested inactive members as of July 1, 2017, with accumulated member contribution balances will receive a refund of their contributions during plan year end June 30, 2018. |
| Data Adjustments and Assumptions | One member missing as of July 1, 2016 was corrected to be active as of July 1, 2016. |
| Child Beneficiaries | Future survivor widow benefits are loaded by 12% to estimate impact of benefits provided to survivor children. The load assumes 90% of members are married with two children at time of death, and benefits for each child are paid for approximately 8 years. |
| General Projection Methodology | Open group projections assume:<br>(i) Salaries will increase and members will decrement as specified in the actuarial assumption section.<br>(ii) Active members who retire, become disabled, die or terminate during the year are replaced with new entrants such that the number of active members remains stable during the projection period. Pay for new entrants in future years is increased by the wage inflation assumption. The average age of a new entrant is based on observed experience over the last five years.<br>(iii) Assets grow at the assumed rate of return.<br>(iv) The sponsor makes the statutory required contribution on a monthly basis.<br>(v) Non-vested members with accumulated plan balances as of July 1, 2017, will receive a refund during plan year end June 30, 2018.<br>Closed group projections are the same as the open group projections except active members who retire, become disabled, die, or terminate are <u>not</u> replaced with new entrants. |
| Decrement Timing | Mid-Year |

# SECTION VII

## SUMMARY OF PRINCIPAL PLAN PROVISIONS

# Summary of Principal Plan Provisions
# Actuarial Valuation as of July 1, 2017

**Employee Eligibility** — All compensated employees of the Police Department are eligible to participate in the Policemen's Pension and Relief Fund.

**Average Annual Compensation** — The average of any three twelve-consecutive-month periods of employment which produces the highest average annual compensation.

Each twelve-consecutive-month annual compensation is limited to 120% of the *Average Adjusted Salary* received by the member in the two consecutive twelve-consecutive-month periods immediately preceding the twelve-consecutive-month period used in determining benefits.

The *Average Adjusted Salary* is base salary (exclusive of all overtime and other pay) of the year used in determining benefits multiplied by the ratio of total salary (includes all overtime and other pay) to base salary from the respective preceding twelve-consecutive-month period.

**Determining Years of Service Credit (**Credited Service**)** — The number of years that the member has contributed to the employees retirement and benefit fund.

*Prior Military Service* — A city may provide that members who have been honorably discharged from the military shall receive up to two years prior service credit for military service prior to their employment with the city.

*Current Military Service* — Any current member who has been on qualified military service in the armed forces of the United States with an honorable discharge may, within six months from his or her date of discharge, be given credit for continuous service in the paid police or fire department.

Any member who has served in active duty with the armed forces of the United States, whether prior to or subsequent to becoming a member of a paid police or fire department, shall receive one additional percent for each year so served in active military duty, up to a maximum of four additional percent.

Absence from the service because of sickness or injury for a period of two years or less shall not be construed as time out of service.

**Contributions** — Participating employees contribute 9.5% of compensation. Participating employees hired on or after January 1, 2010 contribute 9.5% of compensation. The municipality has elected to contribute the minimum employer contribution under the Alternative funding policy.

**Normal Retirement** — Members are eligible at the earlier of age 50 with 20 years of credited service or age 65.

**Benefit Commencement** — Annual retirement pension benefits commence upon retirement or upon the member attaining age fifty, whichever is later, payable in twelve monthly installments.

**Accrued Benefit** — The annual retirement benefit equals 60% of average annual compensation, not less than $6,000, plus an additional percentage of average annual compensation for service over 20 years equal to 2% for each year of service between 20 and 25 and 1% for each year of service between 25 and 30 years. Employees serving in the military are eligible for an additional 1% of average annual compensation for each year of military service up to four years. The maximum benefit is limited to 75% of average annual compensation. Benefits continue for life.

**Disability Retirement** — Members are eligible after earning five years of service. No service requirement if disability is service related.

The monthly disability benefit equals the greater of 60% of monthly salary at disability or $500. Employees serving in the military are eligible for an additional benefit of 1% of monthly salary at disability for each year of military service up to four years. Disability benefits, when aggregated with monthly state workers compensation benefits, shall not exceed 100% of the member's monthly compensation at the time of disability. Benefits continue for life or until recovery.

**Death Benefits** — Members are eligible after earning five years of service. No service requirement if death is service related. Retirees and terminated vested participants are also eligible.

The benefit is equal to 60% of the participant's benefit, but not less than $300 per month, payable to the spouse until death or remarriage. Other dependents (children, parents, brothers and sisters) are also eligible for death benefits. To each dependent child, 20 percent of the participant's benefit until the child attains eighteen or marries; to each dependent orphaned child, 25 percent of the participant's benefit until the child attains 18 or marries; to each dependent parent, 10 percent of the participant's benefit for life, and to each dependent brother or sister, the sum of fifty dollars per month (but a total not to exceed $100 per month) until such individual attains the age of eighteen years or marries.

In no case shall the payments to the surviving spouse and children be reduced below 65 percent of the total amount paid to all dependents.

**Supplemental Pension Benefits** — All retirees, surviving beneficiaries and disability pensioners are eligible for automatic cost-of-living benefits commencing on the first day of July following two years of retirement. The benefits equal the percentage increase in the Consumer Price Index, limited to 4% (2% for some disability retirees), multiplied by the sum of the allowable amount which is the first $15,000 of the total annual benefits paid and the accumulated supplemental pension amounts for prior years.

**Termination Benefits** — Any member who terminates employment prior to retirement will be entitled to a refund of contributions without interest.

**Refunds** — Any member who terminates from their department without receiving a retirement pension shall be refunded all deductions made from his salary, without interest. Any member who receives such a refund and subsequently wishes to reenter the department must repay to the pension fund all sums refunded with interest at the rate of eight percent annual.

# SECTION VIII

## APPENDIX – PROJECTION DATA

# Actuarial Projections – Optional Funding in 2019
## Table A-1

| Valuation Plan Year End 30-Jun | Number Active | Number Pay Status | Total Assets: Assets (boy) | Benefit Payments | Expenses | Employer Contribs. | Employee Contribs. | Premium Tax Allocation Contribs. | Investment Income | Assets (eoy) | Actuarial Accrued Liability | Unfunded Liability | Funded Ratio |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2017 | 25 | 19 | $6,314,273 | $647,064 | $600 | $283,360 | $105,346 | $226,843 | $563,266 | $6,845,424 | $14,887,506 | $8,042,082 | 46% |
| 2018 | 23 | 20 | 6,845,424 | 698,459 | 4,581 | 303,196 | 107,720 | 231,517 | 374,854 | 7,159,671 | 15,471,834 | 8,312,163 | 46% |
| 2019 | 22 | 20 | 7,159,671 | 708,016 | 4,594 | 649,140 | 107,859 | 239,708 | 401,490 | 7,845,258 | 16,079,026 | 8,233,768 | 49% |
| 2020 | 20 | 21 | 7,845,258 | 742,652 | 4,617 | 663,520 | 106,219 | 250,103 | 438,885 | 8,556,717 | 16,676,336 | 8,119,619 | 51% |
| 2021 | 19 | 22 | 8,556,717 | 781,207 | 4,649 | 651,203 | 103,872 | 258,311 | 476,793 | 9,261,040 | 17,255,670 | 7,994,630 | 54% |
| 2022 | 17 | 22 | 9,261,040 | 816,191 | 4,689 | 635,865 | 102,378 | 264,875 | 514,302 | 9,957,579 | 17,824,798 | 7,867,219 | 56% |
| 2023 | 16 | 23 | 9,957,579 | 850,346 | 4,734 | 623,219 | 101,052 | 272,441 | 551,510 | 10,650,720 | 18,385,131 | 7,734,411 | 58% |
| 2024 | 16 | 23 | 10,650,720 | 872,551 | 4,783 | 612,532 | 101,246 | 279,237 | 588,929 | 11,355,330 | 18,954,927 | 7,599,597 | 60% |
| 2025 | 15 | 23 | 11,355,330 | 889,097 | 4,838 | 606,836 | 102,208 | 285,855 | 627,282 | 12,083,577 | 19,543,768 | 7,460,191 | 62% |
| 2026 | 14 | 23 | 12,083,577 | 900,801 | 4,898 | 604,165 | 103,803 | 292,336 | 667,164 | 12,845,347 | 20,160,525 | 7,315,178 | 64% |
| 2027 | 13 | 24 | 12,845,347 | 925,871 | 4,965 | 603,533 | 103,612 | 299,069 | 708,539 | 13,629,263 | 20,783,929 | 7,154,666 | 66% |
| 2028 | 13 | 24 | 13,629,263 | 957,783 | 5,037 | 593,615 | 102,423 | 308,209 | 750,733 | 14,421,423 | 21,402,202 | 6,980,779 | 67% |
| 2029 | 12 | 24 | 14,421,423 | 977,607 | 5,109 | 580,005 | 102,868 | 316,518 | 793,631 | 15,231,728 | 22,035,277 | 6,803,549 | 69% |
| 2030 | 12 | 24 | 15,231,728 | 993,761 | 5,185 | 572,487 | 104,050 | 324,369 | 837,798 | 16,071,486 | 22,691,181 | 6,619,695 | 71% |
| 2031 | 10 | 25 | 16,071,486 | 1,032,570 | 5,262 | 567,986 | 101,919 | 332,319 | 882,966 | 16,918,844 | 23,332,742 | 6,413,898 | 73% |
| 2032 | 9 | 25 | 16,918,844 | 1,089,201 | 5,343 | 548,537 | 97,103 | 344,021 | 927,691 | 17,741,652 | 23,928,313 | 6,186,661 | 74% |
| 2033 | 9 | 26 | 17,741,652 | 1,126,926 | 5,425 | 519,097 | 94,032 | 355,131 | 971,338 | 18,548,899 | 24,502,463 | 5,953,564 | 76% |
| 2034 | 8 | 26 | 18,548,899 | 1,164,615 | 5,512 | 494,910 | 90,836 | 365,798 | 1,014,259 | 19,344,574 | 25,053,621 | 5,709,047 | 77% |
| 2035 | 7 | 26 | 19,344,574 | 1,208,496 | 5,606 | 469,244 | 87,167 | 378,034 | 1,056,363 | 20,121,280 | 25,571,891 | 5,450,611 | 79% |
| 2036 | 7 | 27 | 20,121,280 | 1,250,165 | 5,701 | 441,758 | 83,616 | 390,328 | 1,097,441 | 20,878,557 | 26,058,465 | 5,179,908 | 80% |
| 2037 | 5 | 28 | 20,878,557 | 1,314,852 | 5,800 | 413,873 | 76,060 | 403,366 | 1,136,726 | 21,587,930 | 26,468,606 | 4,880,676 | 82% |
| 2038 | 4 | 28 | 21,587,930 | 1,406,310 | 5,899 | 367,686 | 64,597 | 419,852 | 1,172,140 | 22,199,995 | 26,753,132 | 4,553,137 | 83% |
| 2039 | 3 | 29 | 22,199,995 | 1,494,385 | 6,000 | 305,713 | 54,190 | 437,239 | 1,201,919 | 22,698,671 | 26,916,315 | 4,217,644 | 84% |
| 2040 | 3 | 29 | 22,698,671 | 1,580,592 | 6,100 | 248,234 | 43,821 | 454,573 | 1,225,634 | 23,084,241 | 26,954,671 | 3,870,430 | 86% |
| 2041 | 2 | 30 | 23,084,241 | 1,657,892 | 6,201 | 190,434 | 33,842 | 473,672 | 1,243,420 | 23,361,516 | 26,871,433 | 3,509,917 | 87% |
| 2042 | 1 | 30 | 23,361,516 | 1,725,041 | 6,303 | 133,590 | 25,387 | 492,118 | 1,255,574 | 23,536,841 | 26,678,514 | 3,141,673 | 88% |
| 2043 | 1 | 30 | 23,536,841 | 1,777,489 | 6,405 | 81,727 | 18,759 | 511,560 | 1,262,731 | 23,627,725 | 26,394,198 | 2,766,473 | 90% |
| 2044 | 1 | 30 | 23,627,725 | 1,806,867 | 6,506 | 59,778 | 14,424 | 530,174 | 1,266,722 | 23,685,450 | 26,045,937 | 2,360,487 | 91% |
| 2045 | 0 | 30 | 23,685,450 | 1,835,427 | 6,607 | 46,550 | 10,264 | 548,942 | 1,269,158 | 23,718,330 | 25,632,483 | 1,914,153 | 93% |
| 2046 | 0 | 29 | 23,718,330 | 1,856,001 | 6,706 | 34,551 | 6,919 | 568,502 | 1,270,519 | 23,736,114 | 25,162,409 | 1,426,295 | 94% |
| 2047 | 0 | 29 | 23,736,114 | 1,863,223 | 6,803 | 25,590 | 4,800 | 587,943 | 1,271,526 | 23,755,947 | 24,650,852 | 894,905 | 96% |
| 2048 | 0 | 29 | 23,755,947 | 1,864,423 | 6,896 | 19,799 | 3,228 | 607,887 | 1,272,922 | 23,788,464 | 24,103,822 | 315,358 | 99% |
| 2049 | 0 | 28 | 23,788,464 | 1,860,320 | 6,984 | 15,533 | 2,087 | 320,914 | 1,266,887 | 23,526,582 | 23,526,582 | 0 | 100% |
| 2050 | 0 | 28 | 23,526,582 | 1,851,529 | 7,065 | 10,435 | 1,290 | 0 | 1,243,853 | 22,923,566 | 22,923,566 | 0 | 100% |
| 2051 | 0 | 27 | 22,923,566 | 1,838,413 | 7,138 | 9,105 | 774 | 0 | 1,210,991 | 22,298,885 | 22,298,885 | 0 | 100% |
| 2052 | 0 | 27 | 22,298,885 | 1,821,755 | 7,202 | 8,277 | 432 | 0 | 1,177,052 | 21,655,688 | 21,655,689 | 0 | 100% |
| 2053 | 0 | 26 | 21,655,688 | 1,801,920 | 7,254 | 7,737 | 199 | 0 | 1,142,192 | 20,996,642 | 20,996,643 | 0 | 100% |
| 2054 | 0 | 26 | 20,996,642 | 1,778,473 | 7,295 | 7,619 | 134 | 0 | 1,106,574 | 20,325,201 | 20,325,202 | 0 | 100% |
| 2055 | 0 | 25 | 20,325,201 | 1,752,735 | 7,321 | 7,453 | 54 | 0 | 1,070,336 | 19,642,989 | 19,642,989 | 0 | 100% |
| 2056 | 0 | 24 | 19,642,989 | 1,724,400 | 7,333 | 7,334 | 0 | 0 | 1,033,578 | 18,952,168 | 18,952,168 | 0 | 100% |
| 2057 | 0 | 24 | 18,952,168 | 1,693,301 | 7,329 | 7,329 | 0 | 0 | 996,427 | 18,255,293 | 18,255,293 | 0 | 100% |

# Actuarial Projections – Optional Funding in 2019
## Table A-2

| Valuation Plan Year End 30-Jun [a] | Closed Group Payroll | New Entrant Payroll | Total Payroll | Employer Contributions: Employee Contributions | Employer Contributions: Gross Normal Cost | Employer Contributions: Net Employer Normal Cost | Employer Contributions: Amortization of UAAL | Employer Contributions: Premium Tax Allocation Contributions | Employer Contributions: Net Employer Amortization | Employer Contributions: Expenses | Employer Contributions: Optional Employer Contribution | Statewide Employer Contribution |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2018 | $1,133,893 | $0 | $1,133,893 | $107,720 | $469,689 | $361,969 | $522,298 | $239,708 | $282,590 | $4,581 | $649,140 | $0 |
| 2019 | 1,135,357 | 67,792 | 1,203,150 | 107,859 | 470,655 | 362,796 | 546,233 | 250,103 | 296,130 | 4,594 | 663,520 | 7,118 |
| 2020 | 1,118,100 | 124,856 | 1,242,956 | 106,219 | 463,187 | 356,968 | 547,930 | 258,311 | 289,619 | 4,617 | 651,203 | 13,110 |
| 2021 | 1,093,393 | 208,751 | 1,302,144 | 103,872 | 452,317 | 348,445 | 547,646 | 264,875 | 282,771 | 4,649 | 635,865 | 21,919 |
| 2022 | 1,077,659 | 275,738 | 1,353,396 | 102,378 | 446,322 | 343,944 | 547,026 | 272,441 | 274,585 | 4,689 | 623,219 | 28,952 |
| 2023 | 1,063,700 | 353,540 | 1,417,241 | 101,052 | 441,426 | 340,374 | 546,661 | 279,237 | 267,424 | 4,734 | 612,532 | 37,122 |
| 2024 | 1,065,750 | 421,192 | 1,486,942 | 101,246 | 442,777 | 341,531 | 546,377 | 285,855 | 260,522 | 4,783 | 606,836 | 44,225 |
| 2025 | 1,075,876 | 486,042 | 1,561,918 | 102,208 | 447,423 | 345,215 | 546,449 | 292,336 | 254,113 | 4,838 | 604,165 | 51,034 |
| 2026 | 1,092,666 | 548,409 | 1,641,075 | 103,803 | 454,773 | 350,970 | 546,734 | 299,069 | 247,665 | 4,898 | 603,533 | 57,583 |
| 2027 | 1,090,649 | 610,640 | 1,701,289 | 103,612 | 453,269 | 349,657 | 547,201 | 308,209 | 238,992 | 4,965 | 593,615 | 64,117 |
| 2028 | 1,078,136 | 699,735 | 1,777,871 | 102,423 | 446,769 | 344,346 | 547,140 | 316,518 | 230,622 | 5,037 | 580,005 | 73,472 |
| 2029 | 1,082,818 | 781,484 | 1,864,301 | 102,868 | 447,897 | 345,029 | 546,717 | 324,369 | 222,348 | 5,109 | 572,487 | 82,056 |
| 2030 | 1,095,261 | 859,806 | 1,955,067 | 104,050 | 452,423 | 348,373 | 546,747 | 332,319 | 214,428 | 5,185 | 567,986 | 90,280 |
| 2031 | 1,072,835 | 938,644 | 2,011,479 | 101,919 | 442,176 | 340,257 | 547,039 | 344,021 | 203,018 | 5,262 | 548,537 | 98,558 |
| 2032 | 1,022,137 | 1,061,909 | 2,084,046 | 97,103 | 419,631 | 322,528 | 546,357 | 355,131 | 191,226 | 5,343 | 519,097 | 111,500 |
| 2033 | 989,809 | 1,180,216 | 2,170,024 | 94,032 | 404,614 | 310,582 | 544,700 | 365,798 | 178,902 | 5,425 | 494,910 | 123,923 |
| 2034 | 956,166 | 1,294,188 | 2,250,355 | 90,836 | 389,168 | 298,332 | 543,433 | 378,034 | 165,399 | 5,512 | 469,244 | 135,890 |
| 2035 | 917,549 | 1,419,340 | 2,336,889 | 87,167 | 371,523 | 284,356 | 542,124 | 390,328 | 151,796 | 5,606 | 441,758 | 149,031 |
| 2036 | 880,168 | 1,547,763 | 2,427,930 | 83,616 | 354,577 | 270,961 | 540,577 | 403,366 | 137,211 | 5,701 | 413,873 | 162,515 |
| 2037 | 800,629 | 1,686,691 | 2,487,320 | 76,060 | 318,807 | 242,747 | 538,991 | 419,852 | 119,139 | 5,800 | 367,686 | 177,103 |
| 2038 | 679,968 | 1,860,376 | 2,540,344 | 64,597 | 266,007 | 201,410 | 535,642 | 437,239 | 98,403 | 5,899 | 305,713 | 195,339 |
| 2039 | 570,417 | 2,038,410 | 2,608,827 | 54,190 | 220,690 | 166,500 | 530,307 | 454,573 | 75,734 | 6,000 | 248,234 | 214,033 |
| 2040 | 461,271 | 2,204,878 | 2,666,149 | 43,821 | 176,651 | 132,830 | 525,175 | 473,672 | 51,503 | 6,100 | 190,434 | 231,512 |
| 2041 | 356,234 | 2,382,328 | 2,738,562 | 33,842 | 133,514 | 99,672 | 519,835 | 492,118 | 27,717 | 6,201 | 133,590 | 250,144 |
| 2042 | 267,229 | 2,546,260 | 2,813,489 | 25,387 | 98,314 | 72,927 | 514,057 | 511,560 | 2,497 | 6,303 | 81,727 | 267,357 |
| 2043 | 197,467 | 2,716,149 | 2,913,616 | 18,759 | 72,133 | 53,374 | 508,668 | 530,174 | 0 | 6,405 | 59,778 | 285,196 |
| 2044 | 151,828 | 2,868,184 | 3,020,012 | 14,424 | 54,467 | 40,043 | 504,018 | 548,942 | 0 | 6,506 | 46,550 | 301,159 |
| 2045 | 108,045 | 3,018,997 | 3,127,042 | 10,264 | 38,208 | 27,944 | 495,527 | 568,502 | 0 | 6,607 | 34,551 | 316,995 |
| 2046 | 72,831 | 3,173,654 | 3,246,485 | 6,919 | 25,803 | 18,884 | 478,723 | 587,943 | 0 | 6,706 | 25,590 | 333,234 |
| 2047 | 50,528 | 3,321,692 | 3,372,220 | 4,800 | 17,796 | 12,996 | 446,941 | 607,887 | 0 | 6,803 | 19,799 | 348,778 |
| 2048 | 33,975 | 3,467,412 | 3,501,387 | 3,228 | 11,865 | 8,637 | 382,499 | 320,914 | 0 | 6,896 | 15,533 [b] | 364,078 |
| 2049 | 21,971 | 3,616,910 | 3,638,881 | 2,087 | 7,636 | 5,549 | 0 | 0 | 0 | 6,984 | 10,435 [b] | 379,776 |
| 2050 | 13,576 | 3,770,774 | 3,784,350 | 1,290 | 4,663 | 3,373 | 0 | 0 | 0 | 7,065 | 9,105 [b] | 395,931 |
| 2051 | 8,150 | 3,928,775 | 3,936,925 | 774 | 2,739 | 1,965 | 0 | 0 | 0 | 7,138 | 8,277 [b] | 412,521 |
| 2052 | 4,543 | 4,086,820 | 4,091,362 | 432 | 1,510 | 1,078 | 0 | 0 | 0 | 7,202 | 7,737 [b] | 429,116 |
| 2053 | 2,097 | 4,251,242 | 4,253,339 | 199 | 682 | 483 | 0 | 0 | 0 | 7,254 | 7,619 [b] | 446,380 |
| 2054 | 1,407 | 4,421,690 | 4,423,097 | 134 | 458 | 324 | 0 | 0 | 0 | 7,295 | 7,453 [b] | 464,277 |
| 2055 | 571 | 4,598,478 | 4,599,049 | 54 | 185 | 131 | 0 | 0 | 0 | 7,321 | 7,334 [b] | 482,840 |
| 2056 | 0 | 4,780,736 | 4,780,736 | 0 | 0 | 0 | 0 | 0 | 0 | 7,333 | 7,329 [b] | 501,977 |
| 2057 | 0 | 4,966,866 | 4,966,866 | 0 | 0 | 0 | 0 | 0 | 0 | 7,329 | 7,311 [b] | 521,521 |

[a] *Assumes employer makes contributions for the applicable valuation plan year in the following fiscal year.*

[b] *Amount required to remain at 100% funded.*

# Actuarial Projections – Conservation Funding in 2019

# Table A-3

| Valuation Plan Year End 30-Jun | Number Active | Number Pay Status | Total Assets: Assets (boy) | Benefit Payments | Expenses | Employer Contribs. | Employee Contribs. | Premium Tax Allocation Contribs. | Investment Income | Assets (eoy) | Actuarial Accrued Liability | Unfunded Liability | Funded Ratio |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2017 | 25 | 19 | $6,314,273 | $647,064 | $600 | $283,360 | $105,346 | $226,843 | $563,266 | $6,845,424 | $14,887,506 | $8,042,082 | 46% |
| 2018 | 23 | 20 | 6,845,424 | 698,459 | 4,581 | 303,196 | 107,720 | 231,517 | 374,854 | 7,159,671 | 15,471,834 | 8,312,163 | 46% |
| 2019 | 22 | 20 | 7,159,671 | 708,016 | 4,594 | 382,073 | 107,859 | 239,708 | 394,244 | 7,570,945 | 16,079,026 | 8,508,081 | 47% |
| 2020 | 20 | 21 | 7,570,945 | 742,652 | 4,617 | 407,718 | 106,219 | 250,103 | 416,857 | 8,004,573 | 16,676,336 | 8,671,763 | 48% |
| 2021 | 19 | 22 | 8,004,573 | 781,207 | 4,649 | 440,074 | 103,872 | 258,311 | 440,697 | 8,461,671 | 17,255,670 | 8,793,999 | 49% |
| 2022 | 17 | 22 | 8,461,671 | 816,191 | 4,689 | 469,792 | 102,378 | 264,875 | 465,830 | 8,943,666 | 17,824,798 | 8,881,132 | 50% |
| 2023 | 16 | 23 | 8,943,666 | 850,346 | 4,734 | 497,543 | 101,052 | 272,441 | 492,335 | 9,451,957 | 18,385,131 | 8,933,174 | 51% |
| 2024 | 16 | 23 | 9,451,957 | 872,551 | 4,783 | 512,837 | 101,246 | 279,237 | 520,291 | 9,988,234 | 18,954,927 | 8,966,693 | 53% |
| 2025 | 15 | 23 | 9,988,234 | 889,097 | 4,838 | 522,010 | 102,208 | 285,855 | 549,791 | 10,554,163 | 19,543,768 | 8,989,605 | 54% |
| 2026 | 14 | 23 | 10,554,163 | 900,801 | 4,898 | 525,950 | 103,803 | 292,336 | 580,924 | 11,151,477 | 20,160,525 | 9,009,048 | 55% |
| 2027 | 13 | 24 | 11,151,477 | 925,871 | 4,965 | 544,515 | 103,612 | 299,069 | 613,775 | 11,781,612 | 20,783,929 | 9,002,317 | 57% |
| 2028 | 13 | 24 | 11,781,612 | 957,783 | 5,037 | 568,360 | 102,423 | 308,209 | 648,427 | 12,446,211 | 21,402,202 | 8,955,991 | 58% |
| 2029 | 12 | 24 | 12,446,211 | 977,607 | 5,109 | 579,572 | 102,868 | 316,518 | 684,982 | 13,147,435 | 22,035,277 | 8,887,842 | 60% |
| 2030 | 12 | 24 | 13,147,435 | 993,761 | 5,185 | 586,956 | 104,050 | 324,369 | 723,555 | 13,887,419 | 22,691,181 | 8,803,762 | 61% |
| 2031 | 10 | 25 | 13,887,419 | 1,032,570 | 5,262 | 619,687 | 101,919 | 332,319 | 764,245 | 14,667,757 | 23,332,742 | 8,664,985 | 63% |
| 2032 | 9 | 25 | 14,667,757 | 1,089,201 | 5,343 | 668,752 | 97,103 | 344,021 | 807,143 | 15,490,232 | 23,928,313 | 8,438,081 | 65% |
| 2033 | 9 | 26 | 15,490,232 | 1,126,926 | 5,425 | 698,035 | 94,032 | 355,131 | 852,366 | 16,357,445 | 24,502,463 | 8,145,018 | 67% |
| 2034 | 8 | 26 | 16,357,445 | 1,164,615 | 5,512 | 727,835 | 90,836 | 365,798 | 900,049 | 17,271,836 | 25,053,621 | 7,781,785 | 69% |
| 2035 | 7 | 26 | 17,271,836 | 1,208,496 | 5,606 | 762,664 | 87,167 | 378,034 | 950,324 | 18,235,923 | 25,571,891 | 7,335,968 | 71% |
| 2036 | 7 | 27 | 18,235,923 | 1,250,165 | 5,701 | 795,125 | 83,616 | 390,328 | 1,003,334 | 19,252,460 | 26,058,465 | 6,806,005 | 74% |
| 2037 | 5 | 28 | 19,252,460 | 1,314,852 | 5,800 | 853,235 | 76,060 | 403,366 | 1,059,211 | 20,323,680 | 26,468,606 | 6,144,926 | 77% |
| 2038 | 4 | 28 | 20,323,680 | 1,406,310 | 5,899 | 937,960 | 64,597 | 419,852 | 1,118,079 | 21,451,959 | 26,753,132 | 5,301,173 | 80% |
| 2039 | 3 | 29 | 21,451,959 | 1,494,385 | 6,000 | 1,017,512 | 54,190 | 437,239 | 1,180,090 | 22,640,605 | 26,916,315 | 4,275,710 | 84% |
| 2040 | 3 | 29 | 22,640,605 | 1,580,592 | 6,100 | 1,095,217 | 43,821 | 454,573 | 1,245,421 | 23,892,945 | 26,954,671 | 3,061,726 | 89% |
| 2041 | 2 | 30 | 23,892,945 | 1,657,892 | 6,201 | 1,161,923 | 33,842 | 473,672 | 1,314,257 | 25,212,546 | 26,871,433 | 1,658,887 | 94% |
| 2042 | 1 | 30 | 25,212,546 | 1,725,041 | 6,303 | 1,217,847 | 25,387 | 492,118 | 1,386,799 | 26,603,353 | 26,678,514 | 75,161 | 100% |
| 2043 | 1 | 30 | 26,603,353 | 1,777,489 | 6,405 | 104,617 | 18,759 | 32,354 | 1,419,009 | 26,394,198 | 26,394,198 | 0 | 100% |
| 2044 | 1 | 30 | 26,394,198 | 1,806,867 | 6,506 | 46,553 | 14,424 | 0 | 1,404,135 | 26,045,937 | 26,045,937 | 0 | 100% |
| 2045 | 0 | 30 | 26,045,937 | 1,835,427 | 6,607 | 34,552 | 10,264 | 0 | 1,383,765 | 25,632,484 | 25,632,483 | 0 | 100% |
| 2046 | 0 | 29 | 25,632,484 | 1,856,001 | 6,706 | 25,583 | 6,919 | 0 | 1,360,130 | 25,162,409 | 25,162,409 | 0 | 100% |
| 2047 | 0 | 29 | 25,162,409 | 1,863,223 | 6,803 | 19,806 | 4,800 | 0 | 1,333,863 | 24,650,852 | 24,650,852 | 0 | 100% |
| 2048 | 0 | 29 | 24,650,852 | 1,864,423 | 6,896 | 15,528 | 3,228 | 0 | 1,305,533 | 24,103,822 | 24,103,822 | 0 | 100% |
| 2049 | 0 | 28 | 24,103,822 | 1,860,320 | 6,984 | 12,534 | 2,087 | 0 | 1,275,443 | 23,526,581 | 23,526,582 | 0 | 100% |
| 2050 | 0 | 28 | 23,526,581 | 1,851,529 | 7,065 | 10,435 | 1,290 | 0 | 1,243,853 | 22,923,565 | 22,923,566 | 0 | 100% |
| 2051 | 0 | 27 | 22,923,565 | 1,838,413 | 7,138 | 9,105 | 774 | 0 | 1,210,991 | 22,298,884 | 22,298,885 | 0 | 100% |
| 2052 | 0 | 27 | 22,298,884 | 1,821,755 | 7,202 | 8,277 | 432 | 0 | 1,177,052 | 21,655,689 | 21,655,689 | 0 | 100% |
| 2053 | 0 | 26 | 21,655,689 | 1,801,920 | 7,254 | 7,737 | 199 | 0 | 1,142,192 | 20,996,643 | 20,996,643 | 0 | 100% |
| 2054 | 0 | 26 | 20,996,643 | 1,778,473 | 7,295 | 7,619 | 134 | 0 | 1,106,574 | 20,325,202 | 20,325,202 | 0 | 100% |
| 2055 | 0 | 25 | 20,325,202 | 1,752,735 | 7,321 | 7,453 | 54 | 0 | 1,070,336 | 19,642,989 | 19,642,989 | 0 | 100% |
| 2056 | 0 | 24 | 19,642,989 | 1,724,400 | 7,333 | 7,334 | 0 | 0 | 1,033,578 | 18,952,168 | 18,952,168 | 0 | 100% |
| 2057 | 0 | 24 | 18,952,168 | 1,693,301 | 7,329 | 7,329 | 0 | 0 | 996,427 | 18,255,294 | 18,255,293 | 0 | 100% |

# Actuarial Projections – Conservation Funding in 2019
# Table A-4

| | Benefit Payment Account [a] | | | | | | | Accumulation Account [b] | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Plan Year End 30-Jun | Assets (boy) | Net Benefit Pmts and Expenses | Employer Contribs. | 8.00% of Pay Employee Contribs. | 100.00% of Premium Tax Allocation | Investment Income | Transfer (To)/From Accumulation Account | Assets (boy)[c] | Net Benefit Pmts and Expenses | Employer Contribs. | 1.50% of Pay Employee Contribs. | 0.00% of Premium Tax Allocation | Investment Income | Statewide Employer Contribution |
| 2018 | $6,845,424 | $703,040 | $303,196 | $107,720 | $231,517 | $374,854 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| 2019 | 7,159,671 | 712,610 | 382,073 | 90,829 | 239,708 | 393,782 | (7,553,453) | 7,553,453 | 0 | 0 | 17,030 | 0 | 462 | 7,118 |
| 2020 | 0 | 747,269 | 407,718 | 89,448 | 250,103 | 0 | 0 | 7,570,945 | 0 | 0 | 16,771 | 0 | 416,857 | 13,110 |
| 2021 | 0 | 785,856 | 440,074 | 87,471 | 258,311 | 0 | 0 | 8,004,573 | 0 | 0 | 16,401 | 0 | 440,697 | 21,919 |
| 2022 | 0 | 820,880 | 469,792 | 86,213 | 264,875 | 0 | 0 | 8,461,671 | 0 | 0 | 16,165 | 0 | 465,830 | 28,952 |
| 2023 | 0 | 855,080 | 497,543 | 85,096 | 272,441 | 0 | 0 | 8,943,666 | 0 | 0 | 15,956 | 0 | 492,335 | 37,122 |
| 2024 | 0 | 877,334 | 512,837 | 85,260 | 279,237 | 0 | 0 | 9,451,957 | 0 | 0 | 15,986 | 0 | 520,291 | 44,225 |
| 2025 | 0 | 893,935 | 522,010 | 86,070 | 285,855 | 0 | 0 | 9,988,234 | 0 | 0 | 16,138 | 0 | 549,791 | 51,034 |
| 2026 | 0 | 905,699 | 525,950 | 87,413 | 292,336 | 0 | 0 | 10,554,163 | 0 | 0 | 16,390 | 0 | 580,924 | 57,583 |
| 2027 | 0 | 930,836 | 544,515 | 87,252 | 299,069 | 0 | 0 | 11,151,477 | 0 | 0 | 16,360 | 0 | 613,775 | 64,117 |
| 2028 | 0 | 962,820 | 568,360 | 86,251 | 308,209 | 0 | 0 | 11,781,612 | 0 | 0 | 16,172 | 0 | 648,427 | 73,472 |
| 2029 | 0 | 982,716 | 579,572 | 86,626 | 316,518 | 0 | 0 | 12,446,211 | 0 | 0 | 16,242 | 0 | 684,982 | 82,056 |
| 2030 | 0 | 998,946 | 586,956 | 87,621 | 324,369 | 0 | 0 | 13,147,435 | 0 | 0 | 16,429 | 0 | 723,555 | 90,280 |
| 2031 | 0 | 1,037,832 | 619,687 | 85,826 | 332,319 | 0 | 0 | 13,887,419 | 0 | 0 | 16,093 | 0 | 764,245 | 98,558 |
| 2032 | 0 | 1,094,544 | 668,752 | 81,771 | 344,021 | 0 | 0 | 14,667,757 | 0 | 0 | 15,332 | 0 | 807,143 | 111,500 |
| 2033 | 0 | 1,132,351 | 698,035 | 79,185 | 355,131 | 0 | 0 | 15,490,232 | 0 | 0 | 14,847 | 0 | 852,366 | 123,923 |
| 2034 | 0 | 1,170,127 | 727,835 | 76,494 | 365,798 | 0 | 0 | 16,357,445 | 0 | 0 | 14,342 | 0 | 900,049 | 135,890 |
| 2035 | 0 | 1,214,102 | 762,664 | 73,404 | 378,034 | 0 | 0 | 17,271,836 | 0 | 0 | 13,763 | 0 | 950,324 | 149,031 |
| 2036 | 0 | 1,255,866 | 795,125 | 70,413 | 390,328 | 0 | 0 | 18,235,923 | 0 | 0 | 13,203 | 0 | 1,003,334 | 162,515 |
| 2037 | 0 | 1,320,652 | 853,235 | 64,051 | 403,366 | 0 | 0 | 19,252,460 | 0 | 0 | 12,009 | 0 | 1,059,211 | 177,103 |
| 2038 | 0 | 1,412,209 | 937,960 | 54,397 | 419,852 | 0 | 0 | 20,323,680 | 0 | 0 | 10,200 | 0 | 1,118,079 | 195,339 |
| 2039 | 0 | 1,500,385 | 1,017,512 | 45,634 | 437,239 | 0 | 0 | 21,451,959 | 0 | 0 | 8,556 | 0 | 1,180,090 | 214,033 |
| 2040 | 0 | 1,586,692 | 1,095,217 | 36,902 | 454,573 | 0 | 0 | 22,640,605 | 0 | 0 | 6,919 | 0 | 1,245,421 | 231,512 |
| 2041 | 0 | 1,664,093 | 1,161,923 | 28,498 | 473,672 | 0 | 0 | 23,892,945 | 0 | 0 | 5,344 | 0 | 1,314,257 | 250,144 |
| 2042 | 0 | 1,731,344 | 1,217,847 | 21,379 | 492,118 | 0 | 0 | 25,212,546 | 0 | 0 | 4,008 | 0 | 1,386,799 | 267,357 |
| 2043 | 0 | 152,769 | 104,617 | 15,797 | 32,354 | 0 | 0 | 26,603,353 | 1,631,125 | 0 | 2,962 | 0 | 1,419,009 | 285,196 |
| 2044 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26,394,199 | 1,813,373 | 46,553 | 14,424 | 0 | 1,404,135 | 301,159 |
| 2045 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26,045,938 | 1,842,034 | 34,552 | 10,264 | 0 | 1,383,765 | 316,995 |
| 2046 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25,632,485 | 1,862,707 | 25,583 | 6,919 | 0 | 1,360,130 | 333,234 |
| 2047 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25,162,410 | 1,870,026 | 19,806 | 4,800 | 0 | 1,333,863 | 348,778 |
| 2048 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24,650,853 | 1,871,319 | 15,528 | 3,228 | 0 | 1,305,533 | 364,078 |
| 2049 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24,103,823 | 1,867,304 | 12,534 | 2,087 | 0 | 1,275,443 | 379,776 |
| 2050 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23,526,583 | 1,858,594 | 10,435 | 1,290 | 0 | 1,243,853 | 395,931 |
| 2051 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22,923,567 | 1,845,551 | 9,105 | 774 | 0 | 1,210,991 | 412,521 |
| 2052 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22,298,886 | 1,828,957 | 8,277 | 432 | 0 | 1,177,052 | 429,116 |
| 2053 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21,655,690 | 1,809,174 | 7,737 | 199 | 0 | 1,142,192 | 446,380 |
| 2054 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20,996,644 | 1,785,768 | 7,619 | 134 | 0 | 1,106,574 | 464,277 |
| 2055 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20,325,203 | 1,760,056 | 7,453 | 54 | 0 | 1,070,336 | 482,840 |
| 2056 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19,642,990 | 1,731,733 | 7,334 | 0 | 0 | 1,033,578 | 501,977 |
| 2057 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18,952,169 | 1,700,630 | 7,329 | 0 | 0 | 996,427 | 521,521 |

[a] *Employer contributions paid from the City's General Fund are used to finance benefits not covered by the applicable employee contributions or premium tax allocation.*

[b] *Assets accumulate in the Pension and Relief Fund.*

[c] *Includes transfer from Benefit Payment Account to Accumulation Account in Plan Year End June 30, 2018*

# Actuarial Projections – Optional Funding in 2047
## Table A-5

| Valuation Plan Year End 30-Jun | Number: Active | Number: Pay Status | Total Assets: Assets (boy) | Benefit Payments | Expenses | Employer Contribs. | Employee Contribs. | Premium Tax Allocation Contribs. | Investment Income | Assets (eoy) | Actuarial Accrued Liability | Unfunded Liability | Funded Ratio |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2017 | 25 | 19 | $6,314,273 | $647,064 | $600 | $283,360 | $105,346 | $226,843 | $563,266 | $6,845,424 | $14,887,506 | $8,042,082 | 46% |
| 2018 | 25 | 20 | 6,845,424 | 698,459 | 4,581 | 303,196 | 107,720 | 231,517 | 374,854 | 7,159,671 | 15,471,834 | 8,312,163 | 46% |
| 2019 | 25 | 20 | 7,159,671 | 708,016 | 4,807 | 324,420 | 114,817 | 239,708 | 392,862 | 7,518,656 | 16,106,468 | 8,587,812 | 47% |
| 2020 | 25 | 21 | 7,518,656 | 742,901 | 4,979 | 347,129 | 118,583 | 250,103 | 412,656 | 7,899,248 | 16,755,436 | 8,856,188 | 47% |
| 2021 | 25 | 22 | 7,899,248 | 782,112 | 5,236 | 371,428 | 124,414 | 258,311 | 433,558 | 8,299,611 | 17,422,619 | 9,123,008 | 48% |
| 2022 | 25 | 22 | 8,299,611 | 818,133 | 5,431 | 397,428 | 129,210 | 264,875 | 455,609 | 8,723,169 | 18,110,562 | 9,387,393 | 48% |
| 2023 | 25 | 23 | 8,723,169 | 853,669 | 5,660 | 425,248 | 135,406 | 272,441 | 479,062 | 9,175,997 | 18,826,660 | 9,650,663 | 49% |
| 2024 | 25 | 23 | 9,175,997 | 877,451 | 5,852 | 455,015 | 142,055 | 279,237 | 504,490 | 9,673,492 | 19,586,861 | 9,913,369 | 49% |
| 2025 | 25 | 23 | 9,673,492 | 895,812 | 6,037 | 486,866 | 149,274 | 285,855 | 532,589 | 10,226,227 | 20,401,413 | 10,175,186 | 50% |
| 2026 | 25 | 23 | 10,226,227 | 909,456 | 6,215 | 520,947 | 156,920 | 292,336 | 563,922 | 10,844,681 | 21,280,020 | 10,435,339 | 51% |
| 2027 | 25 | 24 | 10,844,681 | 936,600 | 6,395 | 557,413 | 162,780 | 299,069 | 598,527 | 11,519,474 | 22,203,190 | 10,683,716 | 52% |
| 2028 | 25 | 24 | 11,519,474 | 970,770 | 6,652 | 596,432 | 170,400 | 308,209 | 636,219 | 12,253,312 | 23,171,932 | 10,918,620 | 53% |
| 2029 | 25 | 24 | 12,253,312 | 993,158 | 6,874 | 638,182 | 178,732 | 316,518 | 677,552 | 13,064,264 | 24,205,650 | 11,141,386 | 54% |
| 2030 | 25 | 24 | 13,064,264 | 1,012,240 | 7,084 | 682,855 | 187,488 | 324,369 | 723,293 | 13,962,946 | 25,313,560 | 11,350,614 | 55% |
| 2031 | 25 | 25 | 13,962,946 | 1,054,202 | 7,291 | 730,655 | 193,032 | 332,319 | 773,239 | 14,930,698 | 26,461,266 | 11,530,568 | 56% |
| 2032 | 25 | 26 | 14,930,698 | 1,114,255 | 7,619 | 781,801 | 200,470 | 344,021 | 826,735 | 15,961,850 | 27,637,888 | 11,676,038 | 58% |
| 2033 | 25 | 26 | 15,961,850 | 1,155,792 | 7,912 | 836,527 | 208,868 | 355,131 | 884,327 | 17,082,999 | 28,869,566 | 11,786,567 | 59% |
| 2034 | 25 | 26 | 17,082,999 | 1,197,860 | 8,188 | 895,084 | 216,706 | 365,798 | 946,932 | 18,301,471 | 30,156,760 | 11,855,289 | 61% |
| 2035 | 25 | 27 | 18,301,471 | 1,246,566 | 8,493 | 957,740 | 225,271 | 378,034 | 1,014,883 | 19,622,340 | 31,497,856 | 11,875,516 | 62% |
| 2036 | 25 | 27 | 19,622,340 | 1,293,677 | 8,795 | 1,024,782 | 234,246 | 390,328 | 1,088,640 | 21,057,865 | 32,899,689 | 11,841,824 | 64% |
| 2037 | 25 | 28 | 21,057,865 | 1,364,301 | 9,117 | 1,096,517 | 239,907 | 403,366 | 1,168,123 | 22,592,360 | 34,326,467 | 11,734,107 | 66% |
| 2038 | 25 | 29 | 22,592,360 | 1,462,196 | 9,528 | 1,173,273 | 244,385 | 419,852 | 1,252,504 | 24,210,650 | 35,747,393 | 11,536,743 | 68% |
| 2039 | 25 | 30 | 24,210,650 | 1,557,906 | 9,961 | 1,255,402 | 250,041 | 437,239 | 1,341,755 | 25,927,219 | 37,166,077 | 11,238,858 | 70% |
| 2040 | 25 | 31 | 25,927,219 | 1,660,136 | 10,383 | 1,343,280 | 254,684 | 454,573 | 1,436,362 | 27,745,600 | 38,571,866 | 10,826,266 | 72% |
| 2041 | 25 | 32 | 27,745,600 | 1,761,773 | 10,852 | 1,437,310 | 261,154 | 473,672 | 1,536,847 | 29,681,958 | 39,969,704 | 10,287,746 | 74% |
| 2042 | 25 | 32 | 29,681,958 | 1,861,606 | 11,293 | 1,537,922 | 267,682 | 492,118 | 1,644,034 | 31,750,816 | 41,365,849 | 9,615,033 | 77% |
| 2043 | 25 | 33 | 31,750,816 | 1,952,708 | 11,764 | 1,645,577 | 276,662 | 511,560 | 1,759,029 | 33,979,172 | 42,779,411 | 8,800,239 | 79% |
| 2044 | 25 | 33 | 33,979,172 | 2,027,994 | 12,201 | 1,760,767 | 286,379 | 530,174 | 1,883,427 | 36,399,725 | 44,228,273 | 7,828,548 | 82% |
| 2045 | 25 | 34 | 36,399,725 | 2,110,520 | 12,645 | 1,884,021 | 296,198 | 548,942 | 2,018,426 | 39,024,147 | 45,710,153 | 6,686,006 | 85% |
| 2046 | 25 | 34 | 39,024,147 | 2,191,060 | 13,107 | 2,015,902 | 307,118 | 568,502 | 2,164,977 | 41,876,480 | 47,233,945 | 5,357,465 | 89% |
| 2047 | 23 | 35 | 41,876,480 | 2,265,049 | 13,561 | 2,083,917 | 318,468 | 587,943 | 2,322,517 | 44,910,715 | 48,810,617 | 3,899,902 | 92% |
| 2048 | 22 | 35 | 44,910,715 | 2,340,095 | 13,632 | 2,110,683 | 313,480 | 607,887 | 2,488,494 | 48,077,532 | 50,375,421 | 2,297,889 | 95% |
| 2049 | 20 | 35 | 48,077,532 | 2,417,202 | 13,723 | 2,069,787 | 308,818 | 628,376 | 2,659,894 | 51,313,482 | 51,924,138 | 610,656 | 99% |
| 2050 | 19 | 36 | 51,313,482 | 2,493,746 | 13,829 | 1,017,781 | 304,531 | 527,683 | 2,804,400 | 53,460,302 | 53,460,302 | 0 | 100% |
| 2051 | 18 | 36 | 53,460,302 | 2,567,152 | 13,947 | 905,933 | 300,014 | 0 | 2,903,006 | 54,988,156 | 54,988,156 | 0 | 100% |
| 2052 | 17 | 36 | 54,988,156 | 2,637,649 | 14,075 | 887,307 | 295,065 | 0 | 2,984,482 | 56,503,286 | 56,503,286 | 0 | 100% |
| 2053 | 16 | 36 | 56,503,286 | 2,710,549 | 14,207 | 866,354 | 289,954 | 0 | 3,065,125 | 57,999,963 | 57,999,964 | 0 | 100% |
| 2054 | 15 | 36 | 57,999,963 | 2,785,446 | 14,342 | 847,831 | 284,646 | 0 | 3,144,761 | 59,477,413 | 59,477,413 | 0 | 100% |
| 2055 | 14 | 36 | 59,477,413 | 2,860,738 | 14,475 | 827,780 | 278,649 | 0 | 3,223,267 | 60,931,895 | 60,931,895 | 0 | 100% |
| 2056 | 13 | 36 | 60,931,895 | 2,936,583 | 14,606 | 804,175 | 271,725 | 0 | 3,300,374 | 62,356,979 | 62,356,979 | 0 | 100% |
| 2057 | 12 | 36 | 62,356,979 | 3,014,427 | 14,733 | 776,817 | 263,597 | 0 | 3,375,676 | 63,743,908 | 63,743,908 | 0 | 100% |

# Actuarial Projections – Optional Funding in 2047
# Table A-6

| | | | | Employer Contributions | | | | | Minimum Payment | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Valuation Plan Year End 30-Jun [a,b] | Total Payroll | Employee Contributions | Gross Normal Cost | Net Employer Normal Cost | Amortization of UAAL | Premium Tax Allocation Contributions | Net Employer Amortization | Expenses | Optional Employer Contribution | Alternative Employer Contribution | Minimum Employer Contribution | Statewide Employer Contribution |
| 2018 | $1,133,893 | $107,720 | $469,689 | $361,969 | $522,298 | $239,708 | $282,590 | $4,581 | $649,140 | $324,420 | $324,420 | $0 |
| 2019 | 1,203,150 | 114,817 | 497,617 | 382,800 | 546,233 | 250,103 | 296,130 | 4,807 | 683,736 | 347,129 | 347,129 | 0 |
| 2020 | 1,242,956 | 118,583 | 512,922 | 394,339 | 571,490 | 258,311 | 313,179 | 4,979 | 712,496 | 371,428 | 371,428 | 0 |
| 2021 | 1,302,144 | 124,414 | 535,545 | 411,131 | 597,325 | 264,875 | 332,450 | 5,236 | 748,817 | 397,428 | 397,428 | 0 |
| 2022 | 1,353,396 | 129,210 | 556,390 | 427,180 | 624,234 | 272,441 | 351,793 | 5,431 | 784,404 | 425,248 | 425,248 | 0 |
| 2023 | 1,417,241 | 135,406 | 582,677 | 447,271 | 652,292 | 279,237 | 373,055 | 5,660 | 825,985 | 455,015 | 455,015 | 0 |
| 2024 | 1,486,942 | 142,055 | 611,227 | 469,172 | 681,746 | 285,855 | 395,891 | 5,852 | 870,915 | 486,866 | 486,866 | 0 |
| 2025 | 1,561,918 | 149,274 | 641,993 | 492,719 | 712,821 | 292,336 | 420,485 | 6,037 | 919,241 | 520,947 | 520,947 | 0 |
| 2026 | 1,641,075 | 156,920 | 674,514 | 517,594 | 745,708 | 299,069 | 446,639 | 6,215 | 970,448 | 557,413 | 557,413 | 0 |
| 2027 | 1,701,289 | 162,780 | 698,162 | 535,382 | 780,600 | 308,209 | 472,391 | 6,395 | 1,014,169 | 596,432 | 596,432 | 0 |
| 2028 | 1,777,871 | 170,400 | 727,534 | 557,133 | 817,018 | 316,518 | 500,500 | 6,652 | 1,064,286 | 638,182 | 638,182 | 0 |
| 2029 | 1,864,301 | 178,732 | 761,677 | 582,945 | 855,118 | 324,369 | 530,749 | 6,874 | 1,120,567 | 682,855 | 682,855 | 0 |
| 2030 | 1,955,067 | 187,488 | 797,901 | 610,413 | 895,344 | 332,319 | 563,025 | 7,084 | 1,180,522 | 730,655 | 730,655 | 0 |
| 2031 | 2,011,479 | 193,032 | 819,590 | 626,558 | 937,993 | 344,021 | 593,972 | 7,291 | 1,227,821 | 781,801 | 781,801 | 0 |
| 2032 | 2,084,046 | 200,470 | 846,676 | 646,206 | 982,213 | 355,131 | 627,082 | 7,619 | 1,280,908 | 836,527 | 836,527 | 0 |
| 2033 | 2,170,024 | 208,868 | 879,384 | 670,516 | 1,028,009 | 365,798 | 662,211 | 7,912 | 1,340,639 | 895,084 | 895,084 | 0 |
| 2034 | 2,250,355 | 216,706 | 909,984 | 693,278 | 1,075,861 | 378,034 | 697,827 | 8,188 | 1,399,293 | 957,740 | 957,740 | 0 |
| 2035 | 2,336,889 | 225,271 | 942,867 | 717,596 | 1,125,763 | 390,328 | 735,435 | 8,493 | 1,461,523 | 1,024,782 | 1,024,782 | 0 |
| 2036 | 2,427,930 | 234,246 | 977,799 | 743,553 | 1,177,781 | 403,366 | 774,415 | 8,795 | 1,526,763 | 1,096,517 | 1,096,517 | 0 |
| 2037 | 2,487,320 | 239,907 | 998,142 | 758,236 | 1,232,190 | 419,852 | 812,338 | 9,117 | 1,579,691 | 1,173,273 | 1,173,273 | 0 |
| 2038 | 2,540,344 | 244,385 | 1,015,146 | 770,761 | 1,287,789 | 437,239 | 850,550 | 9,528 | 1,630,839 | 1,255,402 | 1,255,402 | 0 |
| 2039 | 2,608,827 | 250,041 | 1,040,953 | 790,913 | 1,343,694 | 454,573 | 889,121 | 9,961 | 1,689,995 | 1,343,280 | 1,343,280 | 0 |
| 2040 | 2,666,149 | 254,684 | 1,063,001 | 808,316 | 1,399,446 | 473,672 | 925,774 | 10,383 | 1,744,473 | 1,437,310 | 1,437,310 | 0 |
| 2041 | 2,738,562 | 261,154 | 1,089,964 | 828,811 | 1,454,068 | 492,118 | 961,950 | 10,852 | 1,801,612 | 1,537,922 | 1,537,922 | 0 |
| 2042 | 2,813,489 | 267,682 | 1,119,254 | 851,572 | 1,506,728 | 511,560 | 995,168 | 11,293 | 1,858,033 | 1,645,577 | 1,645,577 | 0 |
| 2043 | 2,913,616 | 276,662 | 1,159,823 | 883,161 | 1,556,769 | 530,174 | 1,026,595 | 11,764 | 1,921,519 | 1,760,767 | 1,760,767 | 0 |
| 2044 | 3,020,012 | 286,379 | 1,201,840 | 915,460 | 1,603,297 | 548,942 | 1,054,355 | 12,201 | 1,982,016 | 1,884,021 | 1,884,021 | 0 |
| 2045 | 3,127,042 | 296,198 | 1,244,930 | 948,732 | 1,643,413 | 568,502 | 1,074,911 | 12,645 | 2,036,288 | 2,015,902 | 2,015,902 | 0 |
| 2046 | 3,246,485 | 307,118 | 1,293,726 | 986,608 | 1,672,146 | 587,943 | 1,084,203 | 13,107 | 2,083,917 | 2,157,015 | 2,083,917 | 0 |
| 2047 | 3,372,220 | 318,468 | 1,344,674 | 1,026,205 | 1,678,803 | 607,887 | 1,070,916 | 13,561 | 2,110,683 | 2,308,006 | 2,110,683 | 0 |
| 2048 | 3,501,387 | 313,480 | 1,331,122 | 1,017,642 | 1,666,890 | 628,376 | 1,038,514 | 13,632 | 2,069,787 | 2,469,566 | 2,069,787 | 17,392 |
| 2049 | 3,638,881 | 308,818 | 1,312,876 | 1,004,058 | 1,594,456 | 527,683 | 945,386 | 13,723 | 1,017,781 | 1,017,781 | 1,017,781 | 36,865 |
| 2050 | 3,784,350 | 304,531 | 1,295,479 | 990,948 | 0 | 0 | 0 | 13,829 | 905,933 [c] | 905,933 | 905,933 | 56,913 |
| 2051 | 3,936,925 | 300,014 | 1,279,149 | 979,134 | 0 | 0 | 0 | 13,947 | 887,307 [c] | 887,307 | 887,307 | 77,360 |
| 2052 | 4,091,362 | 295,065 | 1,261,020 | 965,955 | 0 | 0 | 0 | 14,075 | 866,354 [c] | 866,354 | 866,354 | 98,377 |
| 2053 | 4,253,339 | 289,954 | 1,240,449 | 950,495 | 0 | 0 | 0 | 14,207 | 847,831 [c] | 847,831 | 847,831 | 120,733 |
| 2054 | 4,423,097 | 284,646 | 1,219,158 | 934,512 | 0 | 0 | 0 | 14,342 | 827,780 [c] | 827,780 | 827,780 | 144,022 |
| 2055 | 4,599,049 | 278,649 | 1,196,126 | 917,478 | 0 | 0 | 0 | 14,475 | 804,175 [c] | 804,175 | 804,175 | 168,379 |
| 2056 | 4,780,736 | 271,725 | 1,170,233 | 898,508 | 0 | 0 | 0 | 14,606 | 776,817 [c] | 776,817 | 776,817 | 194,057 |
| 2057 | 4,966,866 | 263,597 | 1,140,297 | 876,700 | 0 | 0 | 0 | 14,733 | 743,288 [c] | 743,288 | 743,288 | 221,194 |

[a] *Assumes sponsor selects Optional funding policy if contributions are lower.*

[b] *Assumes employer makes contributions for the applicable valuation plan year in the following fiscal year.*

[c] *Amount required to remain at 100% funded.*

# Actuarial Projections – Conservation Funding in 2026
# Table A-7

| Valuation Plan Year End 30-Jun | Number | | Total Assets | | | | | | | | Actuarial Accrued Liability | Unfunded Liability | Funded Ratio |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Active | Pay Status | Assets (boy) | Benefit Payments | Expenses | Employer Contribs. | Employee Contribs. | Premium Tax Allocation Contribs. | Investment Income | Assets (eoy) | | | |
| 2017 | 25 | 19 | $6,314,273 | $647,064 | $600 | $283,360 | $105,346 | $226,843 | $563,266 | $6,845,424 | $14,887,506 | $8,042,082 | 46% |
| 2018 | 25 | 20 | 6,845,424 | 698,459 | 4,581 | 303,196 | 107,720 | 231,517 | 374,854 | 7,159,671 | 15,471,834 | 8,312,163 | 46% |
| 2019 | 25 | 20 | 7,159,671 | 708,016 | 4,807 | 324,420 | 114,817 | 239,708 | 392,863 | 7,518,656 | 16,106,468 | 8,587,812 | 47% |
| 2020 | 25 | 21 | 7,518,656 | 742,901 | 4,979 | 347,129 | 118,583 | 250,103 | 412,656 | 7,899,247 | 16,755,436 | 8,856,189 | 47% |
| 2021 | 25 | 22 | 7,899,247 | 782,112 | 5,236 | 371,428 | 124,414 | 258,311 | 433,558 | 8,299,610 | 17,422,619 | 9,123,009 | 48% |
| 2022 | 25 | 22 | 8,299,610 | 818,133 | 5,431 | 397,428 | 129,210 | 264,875 | 455,609 | 8,723,168 | 18,110,562 | 9,387,394 | 48% |
| 2023 | 25 | 23 | 8,723,168 | 853,669 | 5,660 | 425,248 | 135,406 | 272,441 | 479,062 | 9,175,996 | 18,826,660 | 9,650,664 | 49% |
| 2024 | 25 | 23 | 9,175,996 | 877,451 | 5,852 | 455,015 | 142,055 | 279,237 | 504,490 | 9,673,490 | 19,586,861 | 9,913,371 | 49% |
| 2025 | 24 | 23 | 9,673,490 | 895,812 | 6,037 | 486,866 | 149,274 | 285,855 | 532,589 | 10,226,225 | 20,401,413 | 10,175,188 | 50% |
| 2026 | 23 | 23 | 10,226,225 | 909,456 | 6,060 | 495,519 | 151,482 | 292,336 | 563,089 | 10,813,135 | 21,258,574 | 10,445,439 | 51% |
| 2027 | 21 | 24 | 10,813,135 | 936,405 | 6,099 | 515,353 | 151,970 | 299,069 | 595,371 | 11,432,394 | 22,136,846 | 10,704,452 | 52% |
| 2028 | 20 | 24 | 11,432,394 | 970,022 | 6,149 | 540,178 | 151,592 | 308,209 | 629,428 | 12,085,630 | 23,025,593 | 10,939,963 | 52% |
| 2029 | 19 | 24 | 12,085,630 | 991,465 | 6,206 | 552,174 | 152,985 | 316,518 | 665,361 | 12,774,997 | 23,946,188 | 11,171,191 | 53% |
| 2030 | 19 | 24 | 12,774,997 | 1,009,226 | 6,270 | 560,231 | 155,238 | 324,369 | 703,285 | 13,502,624 | 24,908,166 | 11,405,542 | 54% |
| 2031 | 17 | 25 | 13,502,624 | 1,049,658 | 6,340 | 593,569 | 154,285 | 332,319 | 743,300 | 14,270,099 | 25,875,799 | 11,605,700 | 55% |
| 2032 | 16 | 26 | 14,270,099 | 1,107,982 | 6,417 | 643,238 | 150,740 | 344,021 | 785,496 | 15,079,195 | 26,818,923 | 11,739,728 | 56% |
| 2033 | 15 | 26 | 15,079,195 | 1,147,483 | 6,498 | 673,135 | 149,031 | 355,131 | 829,988 | 15,932,499 | 27,763,517 | 11,831,018 | 57% |
| 2034 | 14 | 26 | 15,932,499 | 1,187,086 | 6,587 | 703,602 | 147,300 | 365,798 | 876,912 | 16,832,438 | 28,709,569 | 11,877,131 | 59% |
| 2035 | 13 | 27 | 16,832,438 | 1,232,941 | 6,685 | 739,062 | 145,209 | 378,034 | 926,399 | 17,781,516 | 29,648,699 | 11,867,183 | 60% |
| 2036 | 12 | 27 | 17,781,516 | 1,276,826 | 6,786 | 772,301 | 143,350 | 390,328 | 978,590 | 18,782,473 | 30,583,849 | 11,801,376 | 61% |
| 2037 | 11 | 28 | 18,782,473 | 1,343,854 | 6,891 | 831,605 | 137,215 | 403,366 | 1,033,618 | 19,837,532 | 31,472,177 | 11,634,645 | 63% |
| 2038 | 10 | 29 | 19,837,532 | 1,437,775 | 7,001 | 918,709 | 126,071 | 419,852 | 1,091,603 | 20,948,991 | 32,264,093 | 11,315,102 | 65% |
| 2039 | 9 | 30 | 20,948,991 | 1,528,963 | 7,114 | 1,002,406 | 114,695 | 437,239 | 1,152,690 | 22,119,944 | 32,952,276 | 10,832,332 | 67% |
| 2040 | 7 | 31 | 22,119,944 | 1,626,003 | 7,232 | 1,092,904 | 102,231 | 454,573 | 1,217,044 | 23,353,461 | 33,520,357 | 10,166,896 | 70% |
| 2041 | 6 | 31 | 23,353,461 | 1,721,695 | 7,354 | 1,180,694 | 89,249 | 473,672 | 1,284,836 | 24,652,863 | 33,958,763 | 9,305,900 | 73% |
| 2042 | 5 | 32 | 24,652,863 | 1,814,811 | 7,480 | 1,266,091 | 76,839 | 492,118 | 1,356,254 | 26,021,874 | 34,269,453 | 8,247,579 | 76% |
| 2043 | 4 | 32 | 26,021,874 | 1,898,343 | 7,609 | 1,340,297 | 65,181 | 511,560 | 1,431,504 | 27,464,464 | 34,458,749 | 6,994,285 | 80% |
| 2044 | 4 | 33 | 27,464,464 | 1,965,314 | 7,742 | 1,397,204 | 55,285 | 530,174 | 1,510,806 | 28,984,877 | 34,540,224 | 5,555,347 | 84% |
| 2045 | 3 | 33 | 28,984,877 | 2,038,787 | 7,876 | 1,460,135 | 45,659 | 548,942 | 1,594,387 | 30,587,337 | 34,503,163 | 3,915,826 | 89% |
| 2046 | 2 | 33 | 30,587,337 | 2,109,153 | 8,010 | 1,518,249 | 37,093 | 568,502 | 1,682,485 | 32,276,503 | 34,354,314 | 2,077,811 | 94% |
| 2047 | 2 | 33 | 32,276,503 | 2,166,143 | 8,142 | 1,561,999 | 29,865 | 587,943 | 1,775,357 | 34,057,382 | 34,108,635 | 51,253 | 100% |
| 2048 | 1 | 33 | 34,057,382 | 2,216,188 | 8,272 | 98,788 | 23,326 | 0 | 1,816,115 | 33,771,151 | 33,771,151 | 0 | 100% |
| 2049 | 1 | 33 | 33,771,151 | 2,260,018 | 8,397 | 29,371 | 17,612 | 0 | 1,797,142 | 33,346,861 | 33,346,861 | 0 | 100% |
| 2050 | 1 | 33 | 33,346,861 | 2,297,454 | 8,517 | 17,084 | 12,924 | 0 | 1,772,326 | 32,843,224 | 32,843,224 | 0 | 100% |
| 2051 | 0 | 33 | 32,843,224 | 2,326,512 | 8,630 | 10,286 | 9,153 | 0 | 1,743,548 | 32,271,069 | 32,271,068 | 0 | 100% |
| 2052 | 0 | 32 | 32,271,069 | 2,345,633 | 8,734 | 5,473 | 6,236 | 0 | 1,711,348 | 31,639,759 | 31,639,759 | 0 | 100% |
| 2053 | 0 | 32 | 31,639,759 | 2,355,705 | 8,828 | 3,416 | 4,176 | 0 | 1,676,238 | 30,959,056 | 30,959,056 | 0 | 100% |
| 2054 | 0 | 31 | 30,959,056 | 2,355,800 | 8,911 | 4,560 | 2,845 | 0 | 1,638,790 | 30,240,540 | 30,240,540 | 0 | 100% |
| 2055 | 0 | 31 | 30,240,540 | 2,346,761 | 8,981 | 5,505 | 1,861 | 0 | 1,599,514 | 29,491,678 | 29,491,678 | 0 | 100% |
| 2056 | 0 | 30 | 29,491,678 | 2,330,205 | 9,038 | 5,709 | 1,173 | 0 | 1,558,761 | 28,718,078 | 28,718,078 | 0 | 100% |
| 2057 | 0 | 30 | 28,718,078 | 2,307,861 | 9,080 | 6,163 | 725 | 0 | 1,516,818 | 27,924,843 | 27,924,843 | 0 | 100% |

# Actuarial Projections – Conservation Funding in 2026
# Table A-8

| | Benefit Payment Account [a] | | | | | | Accumulation Account [b] | | | | | | Minimum Payment | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Plan Year End 30-Jun | Assets (boy) | Net Benefit Pmts and Expenses | Employer Contribs. | 8.00% of Pay Employee Contribs. | 100.00% of Premium Tax Allocation | Investment Income | Assets (boy)[c] | Net Benefit Pmts and Expenses | Employer Contribs. | 1.50% of Pay Employee Contribs. | 0.00% of Premium Tax Allocation | Investment Income | Conservation Employer Cont. | Alternative Employer Cont. | Minimum Alt /Cons Cont. | Statewide Employer Contribution |
| 2018 | $6,845,424 | $703,040 | $303,196 | $107,720 | $231,517 | $374,854 | $0 | $0 | $0 | $0 | $0 | $0 | NA | $303,196 | $303,196 | $0 |
| 2019 | 7,159,671 | 712,823 | 324,420 | 114,817 | 239,708 | 392,863 | 0 | 0 | 0 | 0 | 0 | 0 | NA | 324,420 | 324,420 | 0 |
| 2020 | 7,518,656 | 747,880 | 347,129 | 118,583 | 250,103 | 412,656 | 0 | 0 | 0 | 0 | 0 | 0 | NA | 347,129 | 347,129 | 0 |
| 2021 | 7,899,247 | 787,348 | 371,428 | 124,414 | 258,311 | 433,558 | 0 | 0 | 0 | 0 | 0 | 0 | NA | 371,428 | 371,428 | 0 |
| 2022 | 8,299,611 | 823,564 | 397,428 | 129,210 | 264,875 | 455,609 | 0 | 0 | 0 | 0 | 0 | 0 | NA | 397,428 | 397,428 | 0 |
| 2023 | 8,723,168 | 859,329 | 425,248 | 135,406 | 272,441 | 479,062 | 0 | 0 | 0 | 0 | 0 | 0 | NA | 425,248 | 425,248 | 0 |
| 2024 | 9,175,996 | 883,303 | 455,015 | 142,055 | 279,237 | 504,490 | 0 | 0 | 0 | 0 | 0 | 0 | NA | 455,015 | 455,015 | 0 |
| 2025 | 9,673,491 | 901,849 | 486,866 | 149,274 | 285,855 | 532,589 | 0 | 0 | 0 | 0 | 0 | 0 | NA | 486,866 | 486,866 | 0 |
| 2026 | 10,226,226 | 915,516 | 495,519 | 127,661 | 292,336 | 562,442 | 10,788,667 | 0 | 0 | 23,821 | 0 | 646 | 495,519 | 520,947 | 495,519 | 5,563 |
| 2027 | 0 | 942,504 | 515,353 | 128,082 | 299,069 | 0 | 10,813,134 | 0 | 0 | 23,888 | 0 | 595,370 | 515,353 | 557,413 | 515,353 | 11,420 |
| 2028 | 0 | 976,171 | 540,178 | 127,784 | 308,209 | 0 | 11,432,392 | 0 | 0 | 23,808 | 0 | 629,428 | 540,178 | 596,432 | 540,178 | 20,024 |
| 2029 | 0 | 997,671 | 552,174 | 128,979 | 316,518 | 0 | 12,085,628 | 0 | 0 | 24,006 | 0 | 665,361 | 552,174 | 638,182 | 552,174 | 27,711 |
| 2030 | 0 | 1,015,496 | 560,231 | 130,896 | 324,369 | 0 | 12,774,995 | 0 | 0 | 24,342 | 0 | 703,285 | 560,231 | 682,855 | 560,231 | 34,886 |
| 2031 | 0 | 1,055,998 | 593,569 | 130,110 | 332,319 | 0 | 13,502,622 | 0 | 0 | 24,175 | 0 | 743,300 | 593,569 | 730,655 | 593,569 | 41,982 |
| 2032 | 0 | 1,114,399 | 643,238 | 127,140 | 344,021 | 0 | 14,270,097 | 0 | 0 | 23,600 | 0 | 785,496 | 643,238 | 781,801 | 643,238 | 53,623 |
| 2033 | 0 | 1,153,981 | 673,135 | 125,715 | 355,131 | 0 | 15,079,193 | 0 | 0 | 23,316 | 0 | 829,988 | 673,135 | 836,527 | 673,135 | 64,640 |
| 2034 | 0 | 1,193,673 | 703,602 | 124,273 | 365,798 | 0 | 15,932,497 | 0 | 0 | 23,027 | 0 | 876,912 | 703,602 | 895,084 | 703,602 | 75,101 |
| 2035 | 0 | 1,239,626 | 739,062 | 122,530 | 378,034 | 0 | 16,832,436 | 0 | 0 | 22,679 | 0 | 926,399 | 739,062 | 957,740 | 739,062 | 86,623 |
| 2036 | 0 | 1,283,612 | 772,301 | 120,983 | 390,328 | 0 | 17,781,514 | 0 | 0 | 22,367 | 0 | 978,590 | 772,301 | 1,024,782 | 772,301 | 98,364 |
| 2037 | 0 | 1,350,745 | 831,605 | 115,774 | 403,366 | 0 | 18,782,471 | 0 | 0 | 21,441 | 0 | 1,033,618 | 831,605 | 1,096,517 | 831,605 | 111,081 |
| 2038 | 0 | 1,444,776 | 918,709 | 106,215 | 419,852 | 0 | 19,837,530 | 0 | 0 | 19,856 | 0 | 1,091,603 | 918,709 | 1,173,273 | 918,709 | 127,747 |
| 2039 | 0 | 1,536,077 | 1,002,406 | 96,432 | 437,239 | 0 | 20,948,989 | 0 | 0 | 18,263 | 0 | 1,152,690 | 1,002,406 | 1,255,402 | 1,002,406 | 146,089 |
| 2040 | 0 | 1,633,235 | 1,092,904 | 85,758 | 454,573 | 0 | 22,119,942 | 0 | 0 | 16,473 | 0 | 1,217,044 | 1,092,904 | 1,343,280 | 1,092,904 | 164,638 |
| 2041 | 0 | 1,729,049 | 1,180,694 | 74,683 | 473,672 | 0 | 23,353,459 | 0 | 0 | 14,566 | 0 | 1,284,835 | 1,180,694 | 1,437,310 | 1,180,694 | 185,586 |
| 2042 | 0 | 1,822,291 | 1,266,091 | 64,082 | 492,118 | 0 | 24,652,860 | 0 | 0 | 12,757 | 0 | 1,356,253 | 1,266,091 | 1,537,922 | 1,266,091 | 206,118 |
| 2043 | 0 | 1,905,952 | 1,340,297 | 54,095 | 511,560 | 0 | 26,021,870 | 0 | 0 | 11,086 | 0 | 1,431,504 | 1,340,297 | 1,645,577 | 1,340,297 | 228,327 |
| 2044 | 0 | 1,973,056 | 1,397,204 | 45,678 | 530,174 | 0 | 27,464,460 | 0 | 0 | 9,607 | 0 | 1,510,806 | 1,397,204 | 1,760,767 | 1,397,204 | 249,851 |
| 2045 | 0 | 2,046,663 | 1,460,135 | 37,586 | 548,942 | 0 | 28,984,873 | 0 | 0 | 8,073 | 0 | 1,594,387 | 1,460,135 | 1,884,021 | 1,460,135 | 271,832 |
| 2046 | 0 | 2,117,163 | 1,518,249 | 30,412 | 568,502 | 0 | 30,587,333 | 0 | 0 | 6,681 | 0 | 1,682,485 | 1,518,249 | 2,015,902 | 1,518,249 | 294,113 |
| 2047 | 0 | 2,174,285 | 1,561,999 | 24,343 | 587,943 | 0 | 32,276,499 | 0 | 0 | 5,522 | 0 | 1,775,357 | 1,561,999 | 1,685,309 | 1,561,999 | 315,428 |
| 2048 | 0 | 117,647 | 98,788 | 18,859 | 0 | 0 | 34,057,378 | 2,106,813 | 0 | 4,467 | 0 | 1,816,115 | 98,788 | 96,637 | 98,788 | 336,375 |
| 2049 | 0 | 0 | 0 | 0 | 0 | 0 | 33,771,147 | 2,268,415 | 29,371 | 17,612 | 0 | 1,797,141 | 29,371 | 77,649 | 29,371 | 357,561 |
| 2050 | 0 | 0 | 0 | 0 | 0 | 0 | 33,346,857 | 2,305,971 | 17,084 | 12,924 | 0 | 1,772,326 | 17,084 | 60,870 | 17,084 | 378,773 |
| 2051 | 0 | 0 | 0 | 0 | 0 | 0 | 32,843,220 | 2,335,142 | 10,286 | 9,153 | 0 | 1,743,548 | 10,286 | 47,312 | 10,286 | 399,662 |
| 2052 | 0 | 0 | 0 | 0 | 0 | 0 | 32,271,064 | 2,354,367 | 5,473 | 6,236 | 0 | 1,711,348 | 5,473 | 36,342 | 5,473 | 419,855 |
| 2053 | 0 | 0 | 0 | 0 | 0 | 0 | 31,639,754 | 2,364,533 | 3,416 | 4,176 | 0 | 1,676,238 | 3,416 | 27,691 | 3,416 | 439,965 |
| 2054 | 0 | 0 | 0 | 0 | 0 | 0 | 30,959,051 | 2,364,711 | 4,560 | 2,845 | 0 | 1,638,790 | 4,560 | 21,838 | 4,560 | 459,882 |
| 2055 | 0 | 0 | 0 | 0 | 0 | 0 | 30,240,535 | 2,355,742 | 5,505 | 1,861 | 0 | 1,599,513 | 5,505 | 17,753 | 5,505 | 479,843 |
| 2056 | 0 | 0 | 0 | 0 | 0 | 0 | 29,491,672 | 2,339,243 | 5,709 | 1,173 | 0 | 1,558,761 | 5,709 | 14,858 | 5,709 | 499,980 |
| 2057 | 0 | 0 | 0 | 0 | 0 | 0 | 28,718,072 | 2,316,941 | 6,163 | 725 | 0 | 1,516,818 | 6,163 | 12,957 | 6,163 | 520,224 |

[a] *Employer contributions paid from the City's General Fund are used to finance benefits not covered by the applicable employee contributions or premium tax allocation.*

[b] *Assets accumulate in the Pension and Relief Fund.*

[c] *Includes transfer from Benefit Payment Account to Accumulation Account in Plan Year End June 30, 2026.*