

AGRICULTURAL AND NEW YORK STATE HORSE BREEDING DEVELOPMENT FUND

***GASB 75 Actuarial Valuation:
Accounting and Financial Reporting for
Postemployment Benefits Other Than Pensions***

**Full Valuation
For The Fiscal Year Ending
December 31, 2018**



BURKE GROUP

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SECTION I - INTRODUCTION

A. Actuarial Certification

This valuation is a full actuarial valuation for the Agricultural and New York State Horse Breeding Development Fund, and reflects current census, contracted benefit, and rate information. All census, premium, and/or claims information was provided by the government entity or its representatives. Although Burke Group reviews all data provided for reasonableness, it does not independently audit this information for accuracy.

The results presented herein are based upon the following:

- Employee data submitted by the plan sponsor,
- Actuarial methods and assumptions as described in this report,
- Provisions of the plan as summarized herein, and
- Financial information provided to us by the plan sponsor.

Actuarial computations under Governmental Accounting Standards Series Statement No. 75 (GASB 75) are for purposes of fulfilling employer accounting requirements. The calculations reported herein have been made on a basis consistent with our understanding of GASB 75. Determinations for purposes other than meeting employer financial accounting requirements may be significantly different from the results reported herein.

As a community institution, Burke Group takes pride in its ties to the local community. Burke Group employees or employee relatives may be residents, employees, or individuals otherwise directly impacted by decisions made by the entity valued herein. The undersigned do hereby certify that at no time did they allow any potential conflict of interest compromise their professional judgment in producing these results.

The undersigned credentialed actuary meets the qualification standards of the American Academy of Actuaries to render the actuarial opinion contained herein and is available to answer any questions you may have with respect to this report.



Vince Cassano F.S.A., M.A.A.A., F.C.A.

January 11, 2019

Date

SECTION I - INTRODUCTION

B. Summary of Valuation Results

The Total OPEB Liability represents the sum of expected future benefit payments which may be attributed to past service (or "earned"), discounted to the end of the fiscal year using the current discount rate. The Total OPEB Liability is analogous to the Unfunded Actuarial Accrued Liability (AAL) under GASB 45.

| | | |
|-----------------------------|----|----------------|
| Total OPEB Liability | | |
| Actives | | 234,843 |
| Retirees | | <u>212,838</u> |
| Total OPEB Liability | \$ | <u>447,681</u> |

The following outlines the changes to the Total OPEB Liability during the fiscal year, by source.

| | | |
|---|----|-----------------|
| Balance at December 31, 2017 | \$ | 453,733 |
| Changes for the year: | | |
| Service cost | | 63,433 |
| Interest | | 17,028 |
| Changes of benefit terms | | 0 |
| Differences between expected and actual experience | | (37,349) |
| Changes in assumptions or other inputs | | (18,501) |
| Benefit payments | | <u>(30,663)</u> |
| Net changes | | <u>(6,052)</u> |
| Balance at December 31, 2018 | \$ | <u>447,681</u> |
| Covered employee payroll | \$ | 216,840 |
| Total OPEB liability as a percentage of covered employee payroll | | 206.46% |

The OPEB Expense reflects the costs to the OPEB plan incurred during the year, including the service cost, interest cost, immediate recognition of the impact of all plan provision changes, and the amortization of gains and losses due to experience or changes in the assumptions.

| | | |
|--|----|----------------|
| Calculation of the OPEB Expense | | |
| Service cost | \$ | 63,433 |
| Interest cost | \$ | 17,028 |
| Changes of benefit terms | \$ | 0 |
| Amortization of differences between expected and actual experience | \$ | (8,686) |
| Amortization of changes of assumptions or other inputs | \$ | <u>(4,303)</u> |
| OPEB Expense | \$ | <u>67,472</u> |

The following is a summary of the key actuarial assumptions and other inputs used for this valuation.

| | |
|--------------------------------------|-------|
| Key Actuarial Assumptions | |
| Long-Term Bond Rate: | 3.83% |
| Investment Rate of Return: | N/A |
| Year in Which Assets Expire: | 2018 |
| Single Discount Rate: | 3.83% |
| Initial Healthcare Cost Trend Rate: | 5.20% |
| Ultimate Healthcare Cost Trend Rate: | 4.32% |

SECTION I - INTRODUCTION

C. Summary of Changes from the Last Valuation

The first actuarial valuation under GASB 75 was completed for the fiscal year ending December 31, 2018. Prior valuations performed under GASB 45 guidelines have not been restated and are not reflected in historic exhibits.

The last full valuation was done for the fiscal year ending December 31, 2016 under GASB 45 guidelines. A history of changes in the actuarial basis and plan provisions since the later of 10 years and the adoption of GASB 75 may be found in their respective sections of the report.

Demographics:

- Updated census information.

Actuarial Basis:

- Changed accounting standards to GASB 75.
- The Single Discount Rate changed from 4.00% to 3.50% effective January 1, 2018, and 3.83% effective December 31, 2018.
- The Salary scale changed from 3.0% to 3.37% effective January 1, 2018, and 3.36% effective December 31, 2018.
- Mortality rate updated to Adjusted RPH-2014 combined mortality, fully generational using scale MP-2018.
- Updated healthcare cost trend rates to rates effective January 1, 2018 and December 31, 2018.

Plan Costs:

- Updated premium information.
- Included monthly administrative fee of \$2.652 per enrollee to experience rated plans.

Plan Provisions:

- None

SECTION II - DISCLOSURES

A. Components of the OPEB Liability

The following exhibits details the components of the OPEB liability by source.

The Present Value of Benefits represents the sum of all expected future benefit payments, discounted to the end of the fiscal year using the current discount rate.

Present Value of Benefits

| | |
|----------------------------------|----------------------------|
| Actives | 950,983 |
| Retirees | <u>212,838</u> |
| Present Value of Benefits | \$ <u>1,163,821</u> |

The Total OPEB Liability represents the sum of expected future benefit payments which may be attributed to past service (or "earned"), discounted to the end of the fiscal year using the current discount rate. The Total OPEB Liability is analogous to the Unfunded Actuarial Accrued Liability (AAL) under GASB 45.

Total OPEB Liability

| | |
|-----------------------------|--------------------------|
| Actives | 234,843 |
| Retirees | <u>212,838</u> |
| Total OPEB Liability | \$ <u>447,681</u> |

B. Changes in the Total OPEB Liability

The following outlines the changes to the Total OPEB Liability during the fiscal year, by source.

| | |
|--|--------------------------|
| Balance at December 31, 2017 | \$ <u>453,733</u> |
| Changes for the year: | |
| Service cost | 63,433 |
| Interest | 17,028 |
| Changes of benefit terms | 0 |
| Differences between expected and actual experience | (37,349) |
| Changes in assumptions or other inputs | (18,501) |
| Benefit payments | <u>(30,663)</u> |
| Net changes | <u>(6,052)</u> |
| Balance at December 31, 2018 | \$ <u>447,681</u> |

A history of changes in benefit terms may be found in Section V – Plan Provisions.

A history of changes in assumptions or other inputs may be found in Section III – Actuarial Basis.

C. Schedule of Required Contributions

The OPEB plan is currently unfunded.

SECTION II - DISCLOSURES

D. Schedule of Changes in the Total OPEB Liability and Related Ratios

The following exhibit demonstrates up to 10 years of OPEB liabilities, including how those liabilities have evolved over time and the sources of changes each fiscal year.

| | <u>2018</u> |
|---|-------------------|
| Total OPEB Liability | |
| Service cost | \$ 63,433 |
| Interest | 17,028 |
| Changes of benefit terms | 0 |
| Differences between expected and actual experience* | (37,349) |
| Changes in assumptions or other inputs | (18,501) |
| Expected benefit payments** | <u>(30,663)</u> |
| Net changes in total OPEB liability | <u>(6,052)</u> |
| Total OPEB liability – beginning | <u>453,733</u> |
| Total OPEB liability – ending | \$ <u>447,681</u> |
| Covered employee payroll | \$ 216,840 |
| Total OPEB liability as a percentage of covered employee payroll | 206.46% |
| Deferred Outflows – Estimated Net Contributions Subsequent to the Measurement Date | (7,750) |
| Total OPEB Liability – Net of Deferred Outflows | 439,931 |

* Includes differences due to changes in health care trend rates.

** Expected benefit payments includes deferred benefit payments between the measurement date and fiscal year end.

Liabilities calculated under GASB 45 guidelines are not restated or included within this exhibit.

A history of changes in benefit terms may be found in Section V – Plan Provisions.

A history of changes in assumptions or other inputs may be found in Section III – Actuarial Basis.

SECTION II - DISCLOSURES

OPEB Expense

The OPEB Expense reflects the costs to the OPEB plan incurred during the year, including the service cost, interest cost, immediate recognition of the impact of all plan provision changes, and the amortization of gains and losses due to experience or changes in the assumptions.

Calculation of the OPEB Expense

| | | |
|--|----|----------------|
| Service cost | \$ | 63,433 |
| Interest cost | \$ | 17,028 |
| Changes of benefit terms | \$ | 0 |
| Amortization of differences between expected and actual experience | \$ | (8,686) |
| Amortization of changes of assumptions or other inputs | \$ | <u>(4,303)</u> |
| Total OPEB Expense | \$ | <u>67,472</u> |
| | | |
| Deferred Outflows – Estimated Net Contributions Subsequent to the Measurement Date | \$ | 7,750 |

E. Deferred Outflows and Inflows of Resources Related to OPEB

The following deferrals of outflows and inflows were reported during the fiscal year.

| | Deferred Outflows of Resources | Deferred Inflows of Resources |
|---|--------------------------------------|-------------------------------------|
| Difference between actual and expected experience | \$ 0 | \$ 28,663 |
| Changes of assumptions or other inputs | \$ 0 | \$ 14,198 |
| Total | \$ 0 | \$ <u>42,861</u> |

F. Projected Deferred Outflows and Inflows of Resources

Net deferred outflows and inflows will be recognized in future years consistent with the following schedule.

| Fiscal year ending December 31, | | Total Net Deferrals |
|--|----|--------------------------------|
| 2019 | \$ | (12,989) |
| 2020 | | (12,989) |
| 2021 | | (12,989) |
| 2022 | | (3,894) |
| Thereafter | | 0 |

SECTION II - DISCLOSURES

G. Schedule of Deferred Outflows and Inflows of Resources due to the difference between actual and expected experience

The following details the source of deferred outflows and inflows of resources each year due to the difference between actual and expected experience. This includes changes in the census, and changes in medical premiums that are different than expected healthcare cost trend rates.

Outstanding amounts are amortized on a straight line basis over the average years to expected retirement.

| <u>Fiscal Year Ending December 31,</u> | <u>Outstanding Amount Beginning of Year</u> | <u>Annual Amortization Amount</u> |
|---|--|--|
| 2018 | \$ (37,349) | \$ (8,686) |

H. Schedule of Deferred Outflows and Inflows of Resources due to changes in assumptions or other inputs

The following details the source of deferred outflows and inflows of resources each year due to the changes in assumptions or other inputs. This includes changes in the long-term bond rate, mortality, and healthcare cost trend rate.

Outstanding amounts are amortized on a straight-line basis over the average years to expected retirement.

| <u>Fiscal Year Ending December 31,</u> | <u>Outstanding Amount Beginning of Year</u> | <u>Annual Amortization Amount</u> |
|---|--|--|
| 2018 | \$ (18,501) | \$ (4,303) |

SECTION II - DISCLOSURES

I. Sensitivity of the total OPEB liability to changes in the discount rate

The discount rate assumption can have a profound impact on total liabilities. The following exhibit demonstrates the effect a 1% change in the discount rate assumption would have on liabilities.

| | 1% Decrease <u>(2.83%)</u> | Discount Rate <u>(3.83%)</u> | 1% Increase <u>(4.83%)</u> |
|----------------------|---|---|---|
| Total OPEB liability | \$ 496,079 | \$ 447,681 | \$ 406,940 |

J. Sensitivity of the total OPEB liability to changes in the healthcare cost trend rate

Healthcare costs can be subject to considerable volatility over time. The following exhibit demonstrates the effect on liabilities of a 1% change in the healthcare cost trend rates.

| | 1% Decrease <u>(4.20% to 3.32%)</u> | Healthcare Cost Trend Rate <u>(5.20% to 4.32%)</u> | 1% Increase <u>(6.20% to 5.32%)</u> |
|----------------------|--|---|--|
| Total OPEB liability | \$ 392,980 | \$ 447,681 | \$ 512,315 |

The full schedule of healthcare cost trend rates is documented in Section III: Actuarial Basis.

K. Expected cash flows

An actuarial valuation under GASB 75 requires the projection of expected benefits to be paid over the lifetime of all active employees, retirees, and dependents covered under the plan. The following chart illustrates the next 10 years of future net employer costs expected in the valuation, based upon the closed group population as of the census date and the assumptions and methodologies disclosed in this report.

| Fiscal Year Ending <u>December 31,</u> | Expected Benefit <u>Payments</u> |
|---|---|
| 2019 | \$ 32,000 |
| 2020 | 30,000 |
| 2021 | 31,000 |
| 2022 | 29,000 |
| 2023 | 28,000 |
| 2024 | 28,000 |
| 2025 | 29,000 |
| 2026 | 29,000 |
| 2027 | 30,000 |
| 2028 | 31,000 |
| Thereafter | 3,030,000 |

SECTION II - DISCLOSURES

L. Participant Data

Plan participants as of July 1, 2018

a. Participant Counts

| | |
|---|--------------|
| | <u>Total</u> |
| Active not eligible to retire | 2 |
| Actives eligible to retire | 1 |
| Inactive employees entitled to but not yet receiving benefit payments | 0 |
| Retired and surviving spouses | 2 |
| Retiree spouses covered | <u>1</u> |
| Total | 6 |

All counts include employees and retirees who opted out of coverage.

b. Supplemental Statistics

| | |
|---|--------------|
| | <u>Total</u> |
| GASB amortization basis* | 4.3 |
| Average years to expected retirement | 8.9 |
| Average future lifetime for non-actives | 8.1 |

** The GASB amortization basis is the total future service years divided by the total population (actives and retirees). The amortization basis must be at least 1.*

c. Active Employees

| <u>Age</u> | Service Groups by Age Groups | | | | | | | <u>TOTAL</u> |
|------------|------------------------------|------------|--------------|--------------|--------------|--------------|------------|--------------|
| | <u>0-4</u> | <u>5-9</u> | <u>10-14</u> | <u>15-19</u> | <u>20-24</u> | <u>25-29</u> | <u>30+</u> | |
| Under 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 25-29 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 30-34 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 35-39 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 40-44 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 45-49 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 50-54 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 55-59 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 60-64 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 65+ | <u>1</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>1</u> |
| TOTAL | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |

d. Retired Employees

| <u>Age</u> | <u>Retirees</u> |
|------------|-----------------|
| Under 55 | 0 |
| 55-59 | 0 |
| 60-64 | 0 |
| 65-69 | 0 |
| 70-74 | 0 |
| 75-79 | 1 |
| 80+ | <u>1</u> |
| Total | 2 |

SECTION III – ACTUARIAL BASIS

A. Employer Policy

| | |
|----------------------------------|---|
| OPEB Plan Type: | Single-employer defined benefit OPEB plan |
| OPEB Plan Funding Policy: | Pay-as-you-go |
| Cadillac Tax Policy: | The employer does not currently have a formal policy in place with regards to potential Cadillac Plan taxes in the future. The employer is assumed to pay all Cadillac Tax costs incurred by the plan. |

B. Actuarial Methods

All actuarial methods are chosen to be consistent with the requirements of GASB 75.

Actuarial Cost Method:

Effective January 1, 2018:
Entry Age Normal, Level Percent of Pay

Valuation of Assets:

Effective January 1, 2018:
No assets have been set aside to fund the liabilities for this plan.

Eligible Plan Participants:

Effective January 1, 2018:
All active employees eligible to participate in any OPEB benefit plan offered by the employer are included in this valuation. Retirees and surviving spouses currently enrolled in an OPEB plan offered by the employer are included in the valuation. Retirees who have opted out or otherwise waived all coverage are not included in the valuation unless explicitly stated otherwise.

Amortization Method:

Effective January 1, 2018:
All amortizable amounts are amortized on a straight-line basis over the GASB amortization basis.

Measurement Date:

Effective January 1, 2018:
Three months prior to fiscal year end.

SECTION III – ACTUARIAL BASIS

C. Actuarial Assumptions

All actuarial assumptions are chosen to be consistent with the requirements of GASB 75 and Actuarial Standards of Practice (ASOPs). Whenever possible, actual plan experience is factored into the setting of actuarial assumptions. Rates based on independent, published sources are used as noted, without audit.

| | |
|-------------------------------------|---|
| Long-Term Bond Rate: | The long-term bond rate is based on the Fidelity Municipal Go AA 20-Year Bond rate as of the measurement date (or the nearest business day thereto). Fiscal Year Beginning 2018 3.50% Fiscal Year Ending 2018 3.83% |
| Investment Rate of Return: | The investment rate of return is based on the actual experience of plan assets, if applicable. Fiscal Year Beginning 2018 N/A Fiscal Year Ending 2018 N/A |
| Year in Which Assets Expire: | The year in which assets set aside in a dedicated trust are expected to be exhausted, if applicable. Fiscal Year Beginning 2018 N/A Fiscal Year Ending 2018 N/A |
| Single Discount Rate: | The single discount rate reflects a blending of the investment rate of return and the long-term bond rate using expected plan benefit payments. Fiscal Year Beginning 2018 3.50% Fiscal Year Ending 2018 3.83% |
| Salary Scale: | The salary scale reflects the rate at which payroll amounts are expected to increase over time for purposes of attributing liabilities under the Entry Age Normal, Level Percent of Pay actuarial cost method. Fiscal Year Beginning 2018 3.37% Fiscal Year Ending 2018 3.36% |

SECTION III – ACTUARIAL BASIS

Mortality Rates:

Effective January 1, 2018:
Adjusted RPH-2014 combined mortality, fully generational using scale MP-2018.

Termination Rates:

Effective January 1, 2018:
2003 Society of Actuaries small plan withdrawal scaled 50%.

Table of Sample Rates:

| <u>Age</u> | <u>Withdrawal</u> |
|------------|-------------------|
| 20 | 0.1215 |
| 25 | 0.0975 |
| 30 | 0.0775 |
| 35 | 0.0605 |
| 40 | 0.0470 |
| 45 | 0.0365 |
| 50 | 0.0280 |
| 55 | 0.0210 |

Retirement Rates:

Effective January 1, 2018:

| <u>Age</u> | <u>Retirement</u> |
|------------|-------------------|
| 55 | 10.0% |
| 56-61 | 5.0% |
| 62 | 40.0% |
| 63-64 | 10.0% |
| 65 | 100.0% |

Marital Assumption:

Effective January 1, 2018:
70% of both male and female employees are assumed to be married at retirement and elect coverage for a spouse. Actual spousal information was used for retirees when available.

Spousal Ages:

Effective January 1, 2018:
Actual age, if reported, for retirees. Otherwise males are assumed to be three years older than females.

Participation Rate:

Effective January 1, 2018:
100% of all active employees currently enrolled in the OPEB plan are assumed to continue coverage into retirement. Employees who have currently waived coverage are assumed not to re-enter the plan prior to retirement.

SECTION III – ACTUARIAL BASIS

Healthcare Cost Trend Rate:

Effective January 1, 2018:

The short term trend rates were based on the National Health Expenditure Projections 2009-2025 and reflect the impact of legislative changes in 2017 and future years. Long-term trend rates were developed using the Society of Actuaries Getzen Long-Term Healthcare Cost Trend Resource Model v2018_c (updated August 2017). CPI Inflation rates are based on The Livingston Survey for December 2017, Long-Term (10-year) Forecast mean rates. Real GDP rates are based on median rates from OECD 2020-2060 GDP projections, published 2017.

| | |
|--|-------|
| Inflation (CPI) for Years 2027+: | 2.37% |
| Real GDP (per capita) for Years 2027+: | 1.82% |
| Excess Medical Cost Growth for Years 2027+: | 1.4% |
| Expected Health Share of GDP in 2027: | 20.4% |
| Share of GDP above which cost growth is assumed to meet resistance: | 25% |
| Year after which medical costs are limited to rate of growth in GDP: | 2075 |

Sample trend rates are shown below:

| <u>Year</u> | <u>Medical Trend Rate</u> |
|-------------|-------------------------------|
| 2018 | 6.20% |
| 2019 | 6.20% |
| 2020 | 6.00% |
| 2021 | 6.10% |
| 2030 | 5.69% |
| 2040 | 5.69% |
| 2050 | 5.26% |
| 2060 | 5.06% |
| 2070 | 4.58% |
| Ultimate | 4.23% |

SECTION III – ACTUARIAL BASIS

Healthcare Cost Trend Rate:

Effective December 31, 2018:

The short term trend rates were based on the National Health Expenditure Projections 2010-2026 and reflect the impact of legislative changes in 2018 and future years. Long-term trend rates were developed using the Society of Actuaries Getzen Long-Term Healthcare Cost Trend Resource Model v2019_b (updated October 2018). CPI Inflation rates are based on The Livingston Survey for June 2018, Long-Term (10-year) Forecast mean rates. Real GDP rates are based on median rates from OECD 2020-2060 GDP projections, published 2018.

| | |
|--|-------|
| Inflation (CPI) for Years 2028+: | 2.36% |
| Real GDP (per capita) for Years 2028+: | 1.91% |
| Excess Medical Cost Growth for Years 2028+: | 1.3% |
| Expected Health Share of GDP in 2028: | 20.5% |
| Share of GDP above which cost growth is assumed to meet resistance: | 25% |
| Year after which medical costs are limited to rate of growth in GDP: | 2075 |

Sample trend rates are shown below:

| <u>Year</u> | <u>Medical Trend Rate</u> |
|-------------|---------------------------|
| 2019 | 5.20% |
| 2020 | 6.10% |
| 2021 | 5.90% |
| 2022 | 5.80% |
| 2030 | 5.67% |
| 2040 | 5.67% |
| 2050 | 5.33% |
| 2060 | 5.13% |
| 2070 | 4.66% |
| Ultimate | 4.32% |

Administrative Fee Trend:

Effective January 1, 2018:

2.50% per year.

Cadillac Tax:

Cadillac taxes are effective for plan years after 2022. The Cadillac tax is an excise tax equal to 40% of the excess of the paid premium over the dollar threshold (\$10,200/\$27,500 in 2018, as adjusted and indexed.). Cadillac taxes are assumed to be indexed at the same rate as the long term Inflation (CPI) factor used for calculating trend rates, subject to legislative adjustments.

Cadillac Tax Thresholds:

Assumed 2019 Thresholds:

Retirees: \$12,248

Spouses: \$17,881

SECTION IV – PLAN COSTS

A. Premium or Premium Equivalency Rates

Empire Plan (NYSHIP)

| | | |
|----------------------------|-------------------------|----------|
| Plan Type: | Medical and Drug | |
| Funding Method: | Pooled Experience* | |
| Plan Status: | Open to New Entrants | |
| Coverage: | All Ages | |
| Plan Year: | January 1 – December 31 | |
| Monthly Equivalency Rates: | 2018 | 2019 |
| Single Plan Prime | \$ 1,014.98 | 1,042.85 |
| Family Plan Prime | \$ 2,348.15 | 2,412.77 |

Prime all ages; does not apply MediPrime rates.

Capital District Physicians' Health Plan (CDPHP) (Capital)

| | | |
|------------------------------|-------------------------|----------|
| Plan Type: | Medical and Drug | |
| Funding Method: | Pooled Experience* | |
| Plan Status: | Open to New Entrants | |
| Coverage: | All Ages | |
| Plan Year: | January 1 – December 31 | |
| Monthly Equivalency Rates:** | 2018 | 2019 |
| Single | \$ 697.94 | 735.77 |
| Family | \$ 1,711.47 | 1,801.23 |

* All pooled experience plans are offered through the New York State Health Insurance Program (NYSHIP).

** Rates not available. Rates shown are for a comparable plan offering.

Medicare Part B

| | | |
|-----------------------------|----------------------------|--------|
| Plan Type: | Medicare Part B | |
| Plan Status: | Open to New Entrants | |
| Coverage: | Medicare Eligible Retirees | |
| Plan Year: | January 1 – December 31 | |
| Monthly Premiums: | 2018* | 2019 |
| Single – Current Enrollment | \$ 130.00 | 135.50 |
| Single – Future Enrollment | \$ 134.00 | 135.50 |

* Average rate determined by the U.S. Centers for Medicare & Medicaid Services.

B. Plan Elections

Active Employees: Active employees are assumed to continue their current coverage into retirement. Employees who have opted out of coverage are assumed not to elect coverage prior to retirement.

Current Retirees: Retirees are assumed to continue their current coverage.

Medicare Eligibility: At age 65, retirees are assumed to continue their current coverage.

SECTION IV – PLAN COSTS

C. Claims Costs

Aging – Medical and Drug:

Health Care Costs – From Birth to Death (June 2013) Aggregate Commercial Costs by Age 2010.

Table of Sample Rates:

| <u>Age</u> | <u>Male</u> | <u>Female</u> |
|------------|-------------|---------------|
| Children | 0.534 | 0.534 |
| 20 | 0.455 | 0.597 |
| 25 | 0.385 | 0.789 |
| 30 | 0.472 | 1.112 |
| 35 | 0.588 | 1.210 |
| 40 | 0.734 | 1.195 |
| 45 | 0.914 | 1.263 |
| 50 | 1.190 | 1.468 |
| 55 | 1.566 | 1.712 |
| 60 | 2.023 | 1.995 |
| 65 | 2.583 | 2.419 |

Per Capita Claims Cost *:

2019 annual per capita claims cost for males at age 65 is as follows:

| | <u>Pre-Medicare</u> | <u>Post-Medicare</u> |
|-----------------|---------------------|----------------------|
| Empire Plan | \$ 19,778 | \$ 6,922 |
| CDPHP (Capital) | \$ 13,954 | \$ 4,884 |

* Projected experience rates for retirees enrolled in the Empire Plan, a pooled experience plan offered through *NYSHIP*, were published by Aon Hewitt.

Medicare Integration:

Medicare is assumed to pay 65% of plan costs after age 65.

Administration Fees:

2018: Monthly administrative fee is \$2.652 per enrollee.

Stop Loss Fees:

Included in claims costs.

Claims Cost Basis:

Claims costs are based on premium or premium equivalency rates. Premiums were assumed to be adequate and not excessive for purposes of this analysis.

SECTION V – PLAN PROVISIONS

The following benefit provisions describe the substantive retiree benefit plan as understood by the actuary. Descriptions may be simplified for expediency. The following descriptions do not supersede written plan documents and are solely intended for financial accounting purposes. Use of simplifying terminology, including “for life” or “to age 65,” do not indicate an intention by the employer to vest OPEB benefits, explicitly or implicitly.

A. Summary of Benefit Provisions

New York State Employees Retirement System (NYSERS) eligibility requirements:

Tier 1 (Member before July 1, 1973)

- a. For reduced pension benefits: Age 55 with 5 years of service.
- b. For full pension benefits: Age 55 with 20 years of service.

Tiers 2, 3, and 4 (Became a member after July 1, 1973)

- a. For reduced pension benefits: Age 55 with 5 years of service.
- b. For full pension benefits: Age 62 with 20 years of service.

Tier 5 (Became a member on or after January 1, 2010)

- a. For reduced pension benefits: Age 55 with 10 years of service.
- b. For full pension benefits: Age 62 with 10 years of service.

Tier 6 (Became a member on or after April 1, 2012)

- a. For reduced pension benefits: Age 55 with 10 years of service.
- b. For full pension benefits: Age 63 with 10 years of service.

| | |
|--------------------|---|
| Union/Group: | All current and future retirees |
| Contract: | Contract negotiated through 12/31/18. |
| Eligibility: | An employee must be eligible for retirement under NYSERS. |
| Medical Benefit: | The Fund pays 90% of premiums for retirees and 75% for their spouses. |
| Medicare Part B: | The Fund reimburses 100% of Medicare Part B premiums for retirees and their spouses in retirement. |
| Dental Benefit: | The Fund does not contribute towards premiums in retirement. |
| Life Insurance: | The Fund does not contribute towards life insurance premiums in retirement. |
| Surviving Spouses: | Surviving spouses are eligible to continue coverage under the plan by paying 100% of premiums for coverage. |



SECTION V – PLAN PROVISIONS

B. History of Changes

Fiscal year ending December 31, 2018:

- None

APPENDIX I – CONSIDERATIONS AND GLOSSARY

A. Considerations

GASB 75 Accounting

In addition to pension benefits, many governmental employers provide other postemployment benefits (OPEBs) as part of the total compensation offered to attract and retain the services of qualified employees. OPEBs include postemployment healthcare benefits, dental benefits, life insurance, or other benefits that are provided separately from a pension or sick leave plan. The Governmental Accounting Standards Board (GASB) views a postemployment benefit plan as a deferred compensation arrangement whereby an employer promises to exchange future benefits for employees' current services. GASB statement 75 specifies that accounting for these benefits should be determined under an accrual basis, where the expected value of the benefit is calculated and recognized as a cost over the working lifetime of the employees. Pension and other forms of cash settlement (or longevity) benefits (accounted for under GASB Statements 67, 68, and 71), and most forms of sick leave settlement benefits (accounted for under GASB Statement 16) fall outside the scope of GASB 75 and are not included within these results unless explicitly stated otherwise.

Amendments to GASB 75

This valuation reflects all amendments made to GASB 75 as issued by GASB Statement 85.

Measurement of Liabilities

The starting point in an actuarial valuation for determining an employer's expenses under GASB 75 is the estimation of the Present Value of Benefits of all eligible employer-provided postemployment benefits. These calculations look at the expected benefits to be paid over the lifetime of all active employees, retirees, and dependents covered under the plan. They take into account the probability that benefits will be paid, the expected amount of benefit to be paid, and the time value of money. The parameters chosen for each of these items are called actuarial assumptions.

The Present Value of Benefits of all employer-provided postemployment benefits can also be viewed as the amount of money that, if invested today in a lump sum at the stated discount rate, would allow the plan sponsor to pay for all benefits to current plan participants. The amount of benefits to be paid is based on the plan design, the anticipated claim experience under the plan, and expectations as to future changes in costs.

Actuarial Cost Method

Once the Present Value of Benefits for all employer-provided postemployment benefits is calculated, the lifetime value of the benefits must be spread, or "attributed," over the employee's working career. This attribution generally divides the Present Value of Benefits for employer-provided postemployment benefits into three segments:

1. A segment that represents prior benefit accruals based on past service, known as the Total OPEB Liability.
2. A segment to be accrued in the current year (representing the value of the benefits charged to the current year), called the Service Cost.
3. A remaining segment, reflecting the value of amounts which will be accrued in future years.

GASB 75 requires employers to use the Entry Age Normal, over a level percent of pay actuarial cost method when valuing OPEB obligations.

APPENDIX I – CONSIDERATIONS AND GLOSSARY

Annual OPEB Expense

Employers are required to measure and disclose an amount for annual OPEB expense on the accrual basis of accounting. Annual OPEB cost is equal to the change in the Total OPEB Liability resulting from current-period service (Service Cost), interest on the Total OPEB Liability (Interest Cost), gains or losses due to benefit changes, and the amortization of other gains and losses (including assumption changes and plan experience). In addition, projected earnings on the OPEB plan's instruments are included in the OPEB. Gains and losses that are not amortized during the year are reported as deferred outflows and deferred inflows of resources.

The Substantive Plan

Actuarial valuation calculations must be based on the "substantive plan," which is the plan as understood by the employer and the employees. The substantive plan reflects the design as written in the plan document(s), past practices with regard to plan changes (such as consistent modifications to the level of retiree contributions or deductibles), and formal policy with regard to ongoing changes. Expected changes in plan benefits do not become part of the substantive plan until adopted, communicated to employees, and ratified by any necessary union entities.

Explicit and Implicit Cost Subsidies

Plan costs are composed of Explicit and Implicit employer cost subsidies.

Explicit subsidies exist when the employer pays for a portion of the retiree's healthcare as measured by the premium or premium equivalent rates. The premium rates for the plan are defined below and the cost-sharing arrangement is detailed in the Plan Provisions.

Implicit subsidies exist when the higher healthcare costs for retirees are not directly reflected in premium or premium equivalent rates. An implicit subsidy is the difference between the per capita claims costs of the retirees and the blended premium rates for all plan members.

"Paragraph 4" Trusts

Paragraph 4 of GASB 75 provides special accounting guidelines for OPEB plans which are administered through a trust which meets three requirements:

- Contributions to the trust are irrevocable;
- Trust assets are dedicated to providing OPEB benefits to plan members; and
- Trust assets are legally protected from creditors.

Administration Expenses

Administration expenses incurred by the OPEB plan are outside the scope of this valuation and are not reflected in the liabilities presented within. Administration fees incurred by medical plans offered as part of the OPEB plan are included in expense and liability calculations.

APPENDIX I – CONSIDERATIONS AND GLOSSARY

B. Glossary of Terms

Actuarial Cost Method – Method by which Projected Benefits are attributed over the working lifetime of an employee.

Actuarial Value of Assets – The value of cash, investments and other property held in trust to meet the obligations of the OPEB plan, generally adjusted to reflect prior years' experience.

Agent multiple-employer defined benefit OPEB plan – A defined benefit OPEB plan in which multiple employers pool assets for investment purposes only in a trust that meets the requirements of GASB 75 Paragraph 4. Each employer maintains a separate account for funding postemployment benefits.

Amortization Payment – That portion of the OPEB expense which is designed to pay interest on and to amortize the experience and assumption gains and losses. The amortization period is the remaining service lives of the OPEB covered employees.

Claims Costs – The average, expected amount of medical claims at any given age.

Community Rated – Health insurance premiums within a territory are the same price for all persons, regardless of age or health status.

Cost-sharing multiple-employer defined benefit OPEB plan – A defined benefit OPEB plan in which multiple employers pool assets for investment and funding purposes in a trust that meets the requirements of GASB 75 Paragraph 4. Employers do not maintain separate accounts and obligations are pooled.

Deferred Inflow – Actuarial gains due to plan experience or changes in assumptions and other inputs. Deferred Inflows are not recognized immediately, and are instead amortized separately by source and year over a set period (see GASB Amortization Basis).

Deferred Outflow – Actuarial losses due to plan experience or changes in assumptions and other inputs. Deferred Outflows are not recognized immediately, and are instead amortized separately by source and year over a set period (see GASB Amortization Basis).

Defined Benefit OPEB Plan – An OPEB plan for which postemployment benefits are defined by the benefit terms, whether stated as a dollar amount, an amount based on factors such as age or service at retirement, or a level of coverage.

Defined Contribution OPEB Plan – An OPEB plan for which postemployment benefits are provided through an individual account for each employee or retiree, an employer makes defined contributions into an employee's account while active, and the benefit only depends on the amounts within said account. Plans that fail to meet all three requirements of a Defined Contribution plan are considered Defined Benefit plans under GASB 75.

Entry Age Normal, Level Percent of Pay – An Actuarial Cost Method under which the Present Value of Benefits of each individual included in an actuarial valuation is allocated on a level basis over the earnings of the individual between entry age and assumed exit ages.

Experience Rated – Health insurance premiums for a group are based, in whole or in part, upon the claims history of the group and distinguishing characteristics such as age or health.

Experience Subsidy – Also known as the implicit subsidy, the experience subsidy represents the cost of allowing older, higher risk employees into a medical insurance pool at the same rate as active employees. Calculated as retiree claims less retiree medical premiums paid in total.

APPENDIX I – CONSIDERATIONS AND GLOSSARY

Explicit Subsidy – The cost of any retiree premium contributions paid on behalf of retirees by the employer. Calculated as the total premium less retiree contributions.

Funding Method (Medical Plan) – The method by which health insurance premiums are determined. The most common means are community rated, experience rated, and self-insured.

Funding Policy (OPEB Plan) – The method by which an employer funds OPEB benefits.

GASB Amortization Basis – The period over which Deferred Outflows and Deferred Inflows are amortized under GASB 75 guidelines. This amount is the average future service for all participants enrolled in the plan, actives and retirees. The GASB Amortization Basis must be at least 1.

Healthcare Cost Trend Rate - An assumption about the annual rate(s) of change in the cost of health care benefits currently provided by the postemployment benefit plan, due to factors other than changes in the composition of the plan population by age and dependency status, for each year from the measurement date until the end of the period in which benefits are expected to be paid. The trend rate implicitly considers estimates of health care inflation, changes in health care utilization or delivery patterns, technological advances, and changes in the health status of the plan participants

Implicit Subsidy – Also known as the experience subsidy. Represents the cost of allowing older, higher risk employees into a medical insurance pool at the same rate as active employees. Calculated as retiree claims less retiree medical premiums paid in total.

Insured defined benefit OPEB plan – An OPEB plan in which postemployment benefits are pre-funded through a special agreement with the insurance company. The employer makes payments while the employee is in active service, in return for which the insurance company assumes unconditional responsibility for the OPEB benefits under the plan terms.

Market Value of Assets – The value of cash, investments and other property held in trust to meet the obligations of OPEB plan at prevailing market rates on the valuation date.

Measurement Date – The date as of which the net and total OPEB liability is calculated.

Net OPEB Liability – The Total OPEB Liability less the OPEB plan's fiduciary net position (assets set aside in a qualified trust to pay for OPEB benefits).

Other Postemployment Benefits (OPEB) – Postemployment benefits other than pension benefits. These include postemployment healthcare benefits, life insurance benefits provided separately from a pension plan, and most non-pension defined benefit postemployment benefits.

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

Plan Costs – The real, total cost to an employer as a consequence of offering health insurance benefits. Calculated as the sum of all fees, the explicit subsidy, and the implicit subsidy.

Plan Participant - Any employee or former employee who has rendered service in the credited service period and is expected to receive employer-provided benefits under the postemployment benefits plan, including benefits to or for any beneficiaries and covered dependents.

Pooled Experience – Medical benefits are provided through a collection of employers and other entities that collectively negotiate group medical insurance for purposes of pooling risk and creating leveraging opportunities.

APPENDIX I – CONSIDERATIONS AND GLOSSARY

Present Value of Benefits - The value, as of a specified date, of a future benefit cost or series of benefit costs, where each amount:

- a. is adjusted for the probable effect of events (such as changes in price levels, compensation levels, Medicare, marital status, etc.);
- b. reflects the probability of the occurrence of the event (such as survival, death, disability, termination of employment, utilization of services, etc.) on which payment is conditioned, and
- c. is discounted according to an assumed rate (or rates) to reflect the time value of money.

Projected Benefits – All benefit payments expected to be paid out in future years, including modifications for expected changes including termination, retirement, or death.

Self-Funded – The employer or group assumes complete responsibility for health care losses of the covered employees, usually through setting up a fund from which to pay claims.

Service Cost - The portion of the Actuarial Present Value attributed to employee service during the valuation year.

Single Discount Rate – Under GASB 75, the required discount rate is set on the investments that are expected to be used to finance the payment of benefits. If no pre-funding is established, will be based on a tax exempt, high-quality 20-year tax-exempt general obligation municipal bond yield or index rate.

Single-employer defined benefit OPEB plan – A defined benefit OPEB plan in which only employees of a single employer are covered.

Substantive Plan – The plan provisions of an OPEB plan as reasonably understood or expected by a retiree.

Total Net Deferrals – Net Deferred Inflows and Deferred Outflows to be recognized in a given year.

Total OPEB Liability – The portion of the Actuarial Present Value of benefits attributed to employee service rendered prior to the valuation date.