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February 10, 2021

State Employees' Insurance Board
RSA Tower
201 South Union Street, Suite 200
Montgomery, AL 36104

Dear Members of the Board:

Presented in this report is information to assist the Alabama State Employees' Health Insurance Plan (SEHIP) in meeting the requirements of the Governmental Accounting Standards Board (GASB) Statement No. 75 for the participating employers. The information is presented for the one-year period ending September 30, 2020. GASB Statement No. 75 (GASB 75) establishes accounting and financial reporting requirements for governmental employers who have other postemployment benefits (OPEB) plans. This report has been prepared as of September 30, 2020 (Measurement Date) for financial reporting as of September 30, 2021. The calculations in this report have been made on a basis that is consistent with our understanding of the accounting standard.

The annual actuarial valuation performed as of September 30, 2019 was used as the basis for much of the information presented as of September 30, 2020 in this report. The valuation was based upon data furnished by the Alabama State Employees Retirement System (System) and the SEIB staff, concerning active, inactive, and retired members along with pertinent claims data and financial information. This information was reviewed for completeness and internal consistency, but was not audited. The valuation results depend on the integrity of the data. If any of the information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

To the best of our knowledge, the information contained in this report is complete and accurate. These calculations were performed by, and under the supervision of, independent consulting actuaries with experience in performing valuations for public retirement systems and retiree health benefit plans. In addition, the valuation was prepared in accordance with generally accepted actuarial principles and practices as well as with Actuarial Standards of Practice prescribed by the Actuarial Standards Board.



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The calculations are based on the current provisions of the System, and on actuarial assumptions that are, individually and in the aggregate, internally consistent and reasonably based on the actual experience of the System. In addition, the calculations were completed in compliance with the laws governing the System. The undersigned are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

These results are only for financial reporting and may not be appropriate for funding purposes or other types of analysis. Calculations for purposes other than satisfying the requirements of GASB 75 may produce significantly different results. Future actuarial results may differ significantly from the current results presented in this report due to such factors as changes in plan experience or changes in economic or demographic assumptions.

In order to prepare the results in this report, we have utilized appropriate actuarial models that were developed for this purpose. These models use assumptions about future contingent events along with recognized actuarial approaches to develop the needed results.

This is to certify that the independent consulting actuary is a member of the American Academy of Actuaries and has experience in performing valuations for public retirement systems and retiree health benefit plans, that the valuations were prepared in accordance with principles of practice prescribed by the Actuarial Standards Board, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the medical plans and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of each plan.

Respectfully submitted,

A handwritten signature in blue ink that reads 'Alisa Bennett'.

Alisa Bennett, FSA, EA, FCA, MAAA
President

A handwritten signature in blue ink that reads 'Ben Mobley'.

Ben Mobley, ASA, FCA, MAAA
Consulting Actuary

AB/BM:jf



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Section I – Summary of Principal Results

**REPORT OF THE ANNUAL GASB STATEMENT NO. 75
ALABAMA STATE EMPLOYEES
PREPARED AS OF SEPTEMBER 30, 2020**

Valuation Date (VD):	September 30, 2019	September 30, 2018
Measurement Date (MD):	September 30, 2020	September 30, 2019
Reporting Date (RD):	September 30, 2021	September 30, 2020
Discount Rate:		
Long-Term Expected Rate of Return	7.50%	7.50%
Municipal Bond Index Rate at Measurement Date	2.25%	3.00%
Year in which Fiduciary Net Position is Projected to be Depleted	N/A	2035
Single Equivalent Interest Rate at Measurement Date	7.50%	3.63%
Net OPEB Liability:		
Total OPEB Liability (TOL)	\$ 1,198,800,670	\$ 1,920,611,110
Fiduciary Net Position (FNP)	205,730,389	190,855,481
Net OPEB Liability (NOL = TOL – FNP)	\$ 993,070,281	\$ 1,729,755,629
FNP as a percentage of TOL	17.16%	9.94%
OPEB Expense (OE):	\$ (413,327,287)	\$ (210,620,977)
Deferred Outflows of Resources:	\$ 99,536,109	\$ 128,527,712
Deferred Inflows of Resources:	\$ 1,803,585,933	\$ 1,563,699,487



Section II – Introduction

The Governmental Accounting Standards Board issued Statement No. 75 (GASB 75), “Accounting and Financial Reporting for Postemployment Benefit Plans other than Pension” in June 2015. The effective date for reporting under GASB 75 is plan years beginning after June 15, 2017. This report, prepared as of September 30, 2020 (the Measurement Date), presents information to assist the State Employees Health Insurance Plan (SEHIP) in providing the required information under GASB 75 to participating employers. Much of the material provided in this report, including the Net OPEB Liability, is based on the results of the GASB 74 report. See that report for more information on the member data, actuarial assumptions and methods used in developing the GASB 74 results.

GASB 75 requires the inclusion of a Net OPEB Liability (NOL) on the plan sponsor’s balance sheet and a determination of an OPEB Expense (OE), which may bear little relationship to the funding requirements for the SEHIP. In fact, it is possible in some years for the NOL to be an asset or the OE to be an income item. The NOL is set equal to the Total OPEB Liability (TOL) minus the Fiduciary Net Position (FNP). The benefit provisions recognized in the calculation of the TOL are summarized in Schedule A. For the purposes of reporting under GASB 75, the SEHIP is assumed to be a single-employer defined benefit OPEB plan.

OE includes amounts for Service Cost (the Normal Cost under Entry Age Normal (EAN) for the year), interest on the TOL, employee contributions, administrative expenses, other cash flows during the year, recognition of increases/decreases in the TOL due to changes in the benefit structure, actual versus expected experience, actuarial assumption changes, and recognition of investment gains/losses. The actual experience and assumption change impacts are recognized over the average expected remaining service life of the System membership as of the beginning of the measurement period, while investment gains/losses are recognized equally over five years. The development of the OE is shown in Section V. The unrecognized portions of each year’s experience, assumption changes and investment gains/losses are used to develop Deferred Inflows and Outflows of Resources, which also must be included on the employer’s Statement of Net Position.



Section II – Introduction

Among the assumptions needed for the liability calculation is a Single Equivalent Interest Rate (SEIR), as described by GASB 75. To determine the SEIR, the FNP must be projected into the future for as long as there are anticipated benefits payable under the plan’s provisions applicable to the members and beneficiaries of the Plan on the Measurement Date. If the FNP is not projected to be depleted at any point in the future, the long term expected rate of return on plan investments expected to be used to finance the benefit payments may be used as the SEIR.

If, however, the FNP is projected to be depleted, the SEIR is determined as the single rate that will generate a present value of benefit payments equal to the sum of the present value determined by discounting all projected benefit payments through the date of depletion by the long term expected rate of return, and the present value determined by discounting those benefits after the date of depletion by a 20-year tax-exempt municipal bond (rating AA/Aa or higher) rate (Municipal Bond Index Rate). The Municipal Bond Index Rate used, if necessary, for this purpose is the average of the Bond Buyer General Obligation 20-year Municipal Bond Index, the Fidelity General Obligation AA 20-year Municipal Bond Index, and the S&P High Grade 20-year Municipal Bond Index. The rates as of September 30, 2020 were 2.21%, 2.41%, and 2.14% for the Bond Buyer, Fidelity, and S&P Municipal Bond Indices respectively. These three rates resulted in an averaged Municipal Bond Index Rate of 2.25%. The projection of cash flows used to determine the discount rate assumed that as a base, plan contributions will be equal to the lesser of the average of the plan contributions over the last four years, indexed with inflation, or actual benefit payments plus expenses. Also, due to a Board decision on September 16, 2020, an additional \$1.2 million per year will be contributed on top of the base contribution. Based on these projections, our calculations indicate that the FNP is not projected to be depleted, therefore, the long term expected rate of return on plan investments of 7.50% meets the requirements of GASB 75.

The sections that follow provide the results of all the required calculations, presented in the order laid out in GASB 75 for note disclosure and Required Supplementary Information (RSI).



Section III – Financial Statement Notes

The material presented herein will follow the order presented in GASB 75. Paragraph numbers are provided for ease of reference.

Paragraph 51-52.: This paragraph requires information regarding the actuarial assumptions used to measure the TOL. The actuarial assumptions utilized in developing the TOL are outlined in Schedule C. The Total OPEB Liability as of September 30, 2020 was determined based on an actuarial valuation prepared as of September 30, 2019, using the following actuarial assumptions, applied to all periods included in the measurement and rolled forward to the measurement date of September 30, 2020:

Inflation	2.75%
Salary increases	5.00 - 3.25% for State Employees, 4.50% for Police and 3.50 - 3.25% for Judges, including 3.00% wage inflation
Long-term investment rate of return	7.50% compounded annually, net of investment expense, and including inflation
Municipal Bond Index Rate at Measurement Date	2.25%
Municipal Bond Index Rate at Prior Measurement Date	3.00%
Year FNP is projected to be depleted	N/A
Single Equivalent Interest Rate at Measurement Date	7.50%
Single Equivalent Interest Rate at Prior Measurement Date	3.63%
Healthcare cost trend rate	
Pre-Medicare Eligible	6.75%
Medicare Eligible	**
Ultimate trend rate	
Pre-Medicare Eligible	4.75% in 2027
Medicare Eligible	4.75% in 2024
Dental trend rate	4.50%

**Initial Medicare claims are set based on scheduled increases through plan year 2022.



Section III – Financial Statement Notes

Mortality

State Employees: The rates of mortality for the period after service retirement are according to the sex distinct RP-2000 Blue Collar Mortality Table Projected with Scale BB to 2020 with an adjustment of 125% at all ages for males and 120% for females at ages on and after age 78. The rates of mortality for the period after disability retirement are according to the sex distinct RP-2000 Disabled Retiree Mortality Table Projected with Scale BB to 2020 with an adjustment of 130% at all ages for females.

Judicial Employees: Rates of mortality for the period after service retirement are according to the RP-2000 White Collar Mortality Table projected to 2020 using scale BB and adjusted 115% for all ages for males and 112% for ages 78 and over for females. The rates of disabled mortality were based on the RP-2000 Disabled Mortality Table projected to 2020 using scale BB and adjusted 105% for males and 120% for females.

The decremental assumptions and methods used in the valuation were selected based on the actuarial experience study prepared as of September 30, 2015, submitted to and adopted by the Board on September 29, 2016.

The remaining actuarial assumptions (e.g., initial per capita costs, health care cost trends, rate of plan participation, rates of plan election, etc.) used in the September 30, 2019 valuation were based on a review of recent plan experience done concurrently with the September 30, 2019 valuation.



Section III – Financial Statement Notes

Paragraph 52(e) Sensitivity analysis: This paragraph requires disclosure of the sensitivity of the NOL to changes in the health care cost trend rates. The following exhibit presents the NOL of the Plan, calculated using the health care cost trend rates, as well as what the Plan’s NOL would be if it were calculated using a health care cost trend rate that is 1-percentage-point lower or 1-percentage-point higher than the current rate:

	1% Decrease (5.75% decreasing to 3.75% for pre-Medicare, Known decreasing to 3.75% for Medicare eligible)	Current Healthcare Trend Rate (6.75% decreasing to 4.75% for pre-Medicare, Known decreasing to 4.75% for Medicare eligible)	1% Increase (7.75% decreasing to 5.75% for pre-Medicare, Known decreasing to 5.75% for Medicare eligible)
Net OPEB Liability	852,373,161	993,070,281	1,163,691,248

Paragraph 53:

- (a) **Discount rate (SEIR):** The discount rate used to measure the TOL at September 30, 2019 was 3.63%. The discount rate used to measure the TOL at September 30, 2020 was 7.50%.
- (b) **Projected cash flows:** The projection of cash flows used to determine the discount rate assumed that as a base, plan contributions will be equal to the lesser of the average of the plan contributions over the last four years, indexed with inflation, or actual benefit payments plus expenses. Also, due to a Board decision on September 16, 2020, an additional \$1.2 million per year will be contributed on top of the base contribution.
- (c) **Long-term rate of return:** The long-term expected rate of return on OPEB plan investments will be determined based on the allocation of assets by asset class and by the mean and variance of real returns.
- (d) **Municipal bond rate:** The discount rate determination will use a municipal bond rate to the extent the trust is projected to run out of money before all benefits are paid.
- (e) **Periods of projected benefit payments:** Projected future benefit payments for all current plan members were projected through 2118.



Section III – Financial Statement Notes

(f) Assumed asset allocation: The target asset allocation and best estimates of geometric real rates of return for each major asset class are summarized in the following table:

Asset Class	Target Allocation	Long-term Expected Real Rate of Return*
Fixed income	28.2%	4.40%
US Domestic Stocks	55.2%	8.70%
International Developed Market Stocks	10.8%	9.80%
Cash	<u>5.8%</u>	1.50%
Total	100.0%	

*Geometric mean, includes 2.50% inflation

(g) Sensitivity analysis: This paragraph requires disclosure of the sensitivity of the NOL to changes in the discount rate. The following exhibit presents the NOL of the Plan, calculated using the discount rate of 7.50%, as well as the System’s NOL calculated using a discount rate that is 1-percentage-point lower (6.50%) or 1-percentage-point higher (8.50%) than the current rate:

	1% Decrease (6.50%)	Current Discount Rate (7.50%)	1% Increase (8.50%)
Net OPEB Liability	1,135,484,871	993,070,281	873,278,948



Section III – Financial Statement Notes

Paragraph 56 (a): September 30, 2019 is the actuarial valuation date upon which the TOL is based. The result is rolled forward using standard actuarial techniques to the measurement date. The roll forward calculation adds the normal cost (also called the service cost) for the period October 1, 2019 through September 30, 2020, subtracts the actual benefit payments for the same period and then applies the expected investment rate of return for the period. If applicable, actuarial gains and losses arising from benefit changes, the differences between estimates and actual experience, and changes in assumptions or other inputs are reconciled to the TOL as of the Measurement Date. The procedure was used to determine the TOL as of September 30, 2020, as shown in the following table:

TOL Roll Forward	
(a) TOL as of September 30, 2019*	\$ 1,920,611,110
(b) Actual Benefit Payments and Refunds, for the Period October 1, 2019 - September 30, 2020	(54,391,265)
(c) Interest on TOL = [(a) x (Prior SEIR)] + [(b) x (Prior SEIR x 0.5)]	68,730,982
(d) Service Cost for the Period October 1, 2019 - September 30, 2020 at the End of the Period	56,664,882
(e) Change Due to Change in Experience	(71,679,925)
(f) Change Due to Change in Assumptions	(721,135,114)
(g) TOL Rolled Forward to September 30, 2020 = (a) + (b) + (c) + (d) + (e) + (f)	\$ 1,198,800,670

*The TOL as of September 30, 2019 used in the roll forward was calculated using the discount rate as of the Prior Measurement Date.



Section III – Financial Statement Notes

Paragraphs 56(c) and (d): The following change was made to the assumptions as noted:

Changes in actuarial assumptions:

In 2019, assumed rates of tobacco use, spouse participation and the payment of the spousal surcharge were adjusted to more closely reflect actual and anticipated experience.

In 2016, rates of withdrawal, retirement, disability and mortality were adjusted to more closely reflect actual experience. In 2016, economic assumptions and the assumed rates of salary increase were adjusted to more closely reflect actual and anticipated experience.

Recent Plan Changes:

Beginning in plan year 2021, the MAPD plan premium rates exclude the ACA Health Insurer Fee which was repealed on December 20, 2019.

Effective January 1, 2020, the MAPD plan moved from self-insured to fully-insured.

Effective January 1, 2017, Medicare eligible medical and prescription drug benefits are provided through a MAPD plan.

Paragraph 56(f): There were no changes between the measurement date of the collective net OPEB liability and the employer’s reporting date.

Paragraph 56(g): Please see Section V of the report for the development of the collective OPEB expense. The OE for each employer is shown in Appendix B.



Section III – Financial Statement Notes

Paragraph 56(h): Since certain expense items are amortized over closed periods each year, the deferred portions of these items must be tracked annually. If the amounts serve to reduce OPEB expense they are labeled deferred inflows. If they will increase OPEB expense they are labeled deferred outflows. As noted in the previous section, the amortization of these amounts is accomplished on a level dollar basis, with no interest included in the deferred amounts. Experience gains/losses and the impact of changes in actuarial assumptions, if any, are amortized over the average remaining service life of the active and inactive System members at the beginning of the fiscal year. Investment gains and losses are amortized over a fixed five year period.

The table below provides a summary of the deferred inflows and outflows as of the Measurement Date. The allocation of deferred inflows and outflows will be determined by the System.

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences Between Expected and Actual Experience	\$ 0	\$ 980,341,602
Changes of Assumptions	98,337,055	823,244,331
Net Difference Between Projected and Actual Earnings on Plan Investments	1,199,054	0
Total	\$ 99,536,109	\$ 1,803,585,933



Section III – Financial Statement Notes

Paragraph 56(i): The collective amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized in OPEB expense as follows:

Deferred Amounts to be Recognized in Future	
	Deferred Outflows/ (Inflows) of Resources
Year 1	\$ (524,497,739)
Year 2	\$ (479,348,601)
Year 3	\$ (412,326,925)
Year 4	\$ (238,790,450)
Year 5	\$ (49,086,109)
Thereafter	\$ 0

Paragraph 56(j): There are no non-employer contributions recognized for the support provided by non-employer contributing entities in SEHIP.



Section IV – Required Supplementary Information

Paragraph 57: CMC was not required to provide this information.

Paragraph 58: Information about factors that significantly affect trends in the amounts in the schedules required by paragraph 58 should be presented as notes to the schedule. Comments on additional years will be added as they occur.

Changes in actuarial assumptions:

In 2019, assumed rates of tobacco use, spouse participation and the payment of the spousal surcharge were adjusted to more closely reflect actual and anticipated experience.

In 2016, rates of withdrawal, retirement, disability and mortality were adjusted to more closely reflect actual experience. In 2016, economic assumptions and the assumed rates of salary increase were adjusted to more closely reflect actual and anticipated experience.

Recent Plan Changes:

Beginning in plan year 2021, the MAPD plan premium rates exclude the ACA Health Insurer Fee which was repealed on December 20, 2019.

Effective January 1, 2020, the MAPD plan moved from self-insured to fully-insured.

Effective January 1, 2017, Medicare eligible medical and prescription drug benefits are provided through a MAPD plan.



Section IV – Required Supplementary Information

Method and assumptions used in calculations of actuarially determined contributions. The actuarially determined contribution rates in the schedule of employer contributions are calculated as of September 30, two years prior to the end of the fiscal year in which contributions are reported. The following actuarial methods and assumptions were used to determine the most recent contribution rate reported in that schedule:

Actuarial cost method	Projected Unit Credit
Amortization method	Level percent of pay, open
Remaining amortization period	30 years
Asset valuation method	Market value of assets
Inflation	2.75%
Healthcare cost trend rate	
Pre-Medicare eligible	6.75%
Medicare eligible	*
Ultimate trend rate	
Pre-Medicare eligible	4.75% in 2026
Medicare eligible	4.75% in 2024
Dental trend rate	4.50%
Investment rate of return	5.00%, including inflation

** Initial Medicare claims are based on scheduled increase through plan year 2022.*



Section V – OPEB Expense

The OPEB Expense (OE) consists of a number of different items. GASB 75 refers to the first item as Service Cost which is the Normal Cost using the Entry Age Normal actuarial funding method. The second item is interest on the TOL at the Discount Rate in effect as of the Prior Measurement Date.

The next three items refer to any changes that occurred in the TOL due to:

- benefit changes, or
- actual versus expected experience, or
- changes in assumptions or other inputs.

Benefit changes, which are reflected immediately, will increase OE, if there is a benefit improvement for existing Plan members, or decrease OE, if there is a benefit reduction. For the year ended September 30, 2020, there were no benefit changes to be recognized.

The next item to be recognized is the portion of current year changes in TOL due to actual versus expected Plan experience for the year. The portion to recognize in the current year is determined by spreading the total change over the average expected remaining service life of the entire Plan membership at the beginning of the measurement period. The average expected remaining service life of active members is the average number of years the active members are expected to remain in covered employment. For the year ended September 30, 2020 this number is 9.44 years. The average expected remaining service life of the inactive members is zero. Therefore, the recognition period is the weighted average of these two amounts, or 5.33 years. The development of the average remaining service life is shown in the table below.

Calculation of Weighted Average Years of Working Lifetime

Category	Number (1)	Average Years of Working Lifetime (2)
a. Active Members	31,439	9.44
b. Inactive Members	<u>24,262</u>	0.00
c. Total	55,701	
Weighted Average Years of Working Lifetime [(a1 * a2) + (b1 * b2)]/c1		5.33



Section V – OPEB Expense

The last item under changes in TOL is changes in assumptions or other inputs. The portion to recognize in the current year is determined by spreading the total change over the average expected remaining service life of the entire Plan membership, similar to the way experience gains and losses are recognized. For the year ended September 30, 2020, there was a change in the TOL arising from the change in the Discount Rate from 3.63% on the Prior Measurement Date to 7.50% on the Measurement Date.

Member contributions for the year and projected earnings on the FNP at the discount rate serve to reduce the expense. One-fifth of current-period difference between actual and projected earning on the FNP are recognized in the OPEB expense.

Investment Earnings (Gain)/Loss as of September 30, 2020		
(a) Expected Asset Return Rate		7.50%
(b) Beginning of Year Market Value of Assets (BOY)	\$	190,855,481
(c) End of Year Market Value of Assets (EOY)		205,730,389
(d) Expected Return on BOY for Plan Year (a x b)		14,314,161
External Cash Flow		
Contributions - Employer		54,480,012
Contributions - Member		0
Refund of Contributions		0
Benefits Paid		(54,391,265)
Admin Expenses and Other		(88,747)
(e) Total Net External Cash Flow		0
(f) Expected Return on Net Cash Flow (a x 0.5 x e)		0
(g) Projected Earnings for Plan Year (d + f)		14,314,161
(h) Net Investment Income (c - b - e)		14,874,908
Investment Earnings (Gain)/Loss (g - h)	\$	(560,747)



Section V – OPEB Expense

The current year portions of previously determined experience and assumption amounts, recognized as Deferred Outflows of Resources and Deferred Inflows of Resources are included. Deferred Outflows of Resources are added to the OE while Deferred Inflows of Resources are subtracted from the OE. Finally, other miscellaneous items are included.

Collective OPEB Expense Determined as of the Measurement Date	
Service Cost	\$ 56,664,882
Interest on the TOL and Cash Flow	68,730,982
Current-Period Benefit Changes	0
Expensed Portion of Current-Period Differences Between Expected and Actual Experience in the TOL	(13,448,391)
Expensed Portion of Current-Period Changes of Assumptions	(135,297,395)
Member Contributions	0
Projected Earnings on Plan Investments	(14,314,161)
Expensed Portion of Current-Period Differences Between Projected and Actual Earnings on Plan Investments	(112,149)
Administrative Expense	88,747
Other	0
Recognition of Beginning Deferred Outflows/(Inflows) of Resources	<u>(375,639,802)</u>
Collective OPEB Expense	<u>\$ (413,327,287)</u>



Schedule A – Summary of Main Benefit Provisions

ELIGIBILITY: Retiree medical eligibility is attained when a retired employee with at least ten years of service to the State retires, and is immediately eligible to draw a retirement annuity from the Alabama Employees' Retirement System, the Alabama Judicial Retirement System, and for a small group of employers listed below, the Teachers' Retirement System of Alabama.

Teachers' Retirement System of Alabama employers participating in SEHIP:

- Alabama Community College System
- Alabama Commission on Higher Education
- Alabama Department of Rehabilitation Services
- Alabama Department of Education
- Alabama Department of Youth Services

BENEFITS: The State Employees' Insurance Board (SEIB) serves as the Plan Administrator for the SEHIP. This is a self-insured comprehensive health benefit plan serving active and retired State employees and their dependents. As Plan Administrator, the SEIB is primarily responsible for the control and supervision for the SEHIP. The SEIB is also responsible for designing benefits and setting premiums.

PROVISIONS FOR MEDICARE: The SEHIP remains the primary insurer for medical coverage until the retiree is entitled to Medicare. Health benefits will be modified when the retiree or dependent becomes entitled to Medicare.

A Medicare retiree and/or spouse should have both Medicare Parts A and B to have adequate coverage with the State of Alabama. A retiree cannot have SEHIP prescription drug coverage if enrolled for Medicare Part D prescription drug coverage. The SEHIP prescription drug benefit for Medicare retirees and/or spouses is provided through the SEHIP Employer Group Waiver Plan (EGWP).

RETIREE CONTRIBUTIONS: Retiree contributions vary based on type of contract, dependent coverage, Medicare eligibility and election, wellness participation, spousal surcharge, and tobacco usage.

A sliding scale premium is applied after September 30, 2005 to all employees retiring after September 30, 2005, based on their years of service. The premium for retiree coverage is broken down into the employer share (what SEHIP pays) and the retiree share. Under the sliding scale, the retiree will still be responsible for the retiree share, however, the employer share will increase or decrease based upon a retiree's years of service. For those employees retiring with 25 years of service, the employer would pay 100% of the employer share of the premium. For each year less than 25, the employer share would be reduced by 2% and the retiree share will be increased accordingly. For each year over 25, the employer share would be increased by 2% and the retiree share reduced accordingly.

For members retiring on or after January 1, 2012, the 2% reduction in the employer share of the premium for each year of service less than 25 will be increased to 4%. In addition, a 1% reduction in the employer share of the premium will be added for each year of age less than the Medicare entitlement age. This additional age premium component will be removed upon attaining Medicare entitlement.



Schedule A – Summary of Main Benefit Provisions

Employees who retire on disability on or after January 1, 2012 are exempt from the retiree sliding scale premium calculation for a period of two years, provided the retiree applies for Social Security disability. However, these employees are not exempt from the retiree sliding scale premium calculation based on age. To obtain the two-year exemption, the retiree must submit documentation from the Social Security Administration acknowledging the retiree’s application for disability benefits. To maintain the exemption after two years the retiree must be approved for Social Security disability. If the retiree fails to obtain Social Security disability within two years from retirement the retiree permanently loses the eligibility for this exemption.

Furthermore, monthly retiree contributions are subject to discounts for wellness, non-tobacco use and spousal surcharge waiver and are as follows:

- Wellness (Pre-Medicare only): \$25 retiree, \$25 spouse.
- Non-Tobacco use: \$60 retiree, \$60 spouse
- Spousal Surcharge: Spousal surcharge of \$50 if a spouse is covered but is eligible for other insurance coverage.

Sliding Scale (Employer base share)

Type of Contract	Sliding Scale Employer Base Share
Individual Coverage/ Non-Medicare Eligible Retired Member	\$ 555.00
Family Coverage/Non-Medicare Eligible Retired Member and Non-Medicare Eligible Dependent(s)	\$ 968.00
Family Coverage/Non-Medicare Eligible Retired Member and Medicare Eligible Dependent(s)	\$ 845.00
Individual Coverage/ Medicare Eligible Retired Member	\$ 350.00
Family Coverage/ Medicare Eligible Retired Member	\$ 604.00
Family Coverage/Medicare Eligible Retired Member and Medicare Eligible Dependent(s)	\$ 640.00



Schedule A – Summary of Main Benefit Provisions

Retired Members

The base retiree premiums as of January 1, 2020 before sliding scale adjustment, if applicable, are shown below.

Type of Contract	Retiree Monthly Base Premium	Non-Tobacco User, Wellness and No Spouse Surcharge Premium Discount	Retiree Monthly Base Premium With All Discounts
Individual Coverage/ Non-Medicare Eligible Retired Member	\$ 359.00	\$ (85.00)	\$ 274.00
Family Coverage/Non-Medicare Eligible Retired Member and Non-Medicare Eligible Dependent(s)	\$ 756.00	\$ (220.00)	\$ 536.00
Individual Coverage/ Medicare Eligible Retired Member	\$ 75.00	\$ (60.00)	\$ 15.00
Family Coverage/Medicare Eligible Retired Member and Medicare Eligible Dependent(s)	\$ 306.00	\$ (170.00)	\$ 136.00

Dental monthly premiums are \$8 for single coverage and \$15 for family coverage for Blue Cross Blue Shield or Southland. Southland Vision and Cancer coverage are each \$12 for single coverage and \$24 for family coverage.



Schedule A – Summary of Main Benefit Provisions

Highlights of the BlueCard PPO for non-Medicare eligible retirees effective 1/1/2020 are as follows. The SEIB and Blue Cross and Blue Shield of Alabama provided members with a new, comprehensive Medicare Advantage prescription drug plan beginning January 1, 2017. This new plan, Blue Advantage, is a preferred provider organization that combines all the benefits of health and prescription drug coverage under one all-inclusive and convenient plan.

BlueCard PPO for non-Medicare eligible retirees effective 1/1/2020

Medical Benefit	In Network (PPO)	Out Of Network (Non-PPO)
Inpatient Hospital Benefits	\$200 per admission deductible with pre-certification. \$25 co-pay for days 2-5. Covered at 100% of the allowance. All hospital admissions require pre-admission certification except maternity.	\$200 per admission deductible with pre-certification. Covered at 80% of the allowance.
Outpatient Hospital Benefits	Most services covered at 100%, subject to co-pay. In Alabama, outpatient benefits for non-member hospitals are available only in cases of accidental injury.	Most services covered at 80%, subject to deductible.
Physician/Nurse Practitioner Benefits and Routine Preventive Care	Most services covered at 100%, subject to co-pay.	Most services covered at 80%, subject to deductible.
Major Medical General Provisions	\$300 per person each calendar year, maximum of three deductibles per family. \$8,150 individual out-of-pocket maximum; \$16,300 aggregate family maximum. Most services are covered at 80%.	
Prescription Drug Benefit	Participating Pharmacy	Non-Participating Pharmacy
Prescription Drugs	Covered at 100% subject to the following co-pays: Active employees and Non-Medicare Retirees: <ul style="list-style-type: none"> • \$10 co-pay per prescription for Tier 1 Drugs for a 30 or 60 day supply, \$15 for a 90 day supply • 20% co-pay with a \$40 minimum and a \$80 maximum per prescription for Tier 2 Drugs • 20% co-pay with a \$60 minimum and a \$120 maximum per prescription for Tier 3 Drugs • 50% co-pay with a \$150 maximum per prescription for Tier 4 Drugs • \$150 copay for Tier 5 Drugs 	No benefits
SEIB Discounted Vision Care Program – administered by SEIB	In Network	Out Of Network
	One examination per year subject to a \$40 co-pay.	Not covered.



Schedule B – Statement of Actuarial Assumptions and Methods

The assumptions and methods used in the valuation were selected based on the actuarial experience study prepared as of September 30, 2015, submitted to and adopted by the Board on September 29, 2016.

VALUATION DATE: September 30, 2019

PAYROLL GROWTH: 3.00% per annum

HEALTH CARE COST TREND RATES: The following chart details the trend assumptions

Year	Pre-Medicare Medical Trend*	Medicare-Eligible Medical Trend*	SEHIP Dental Trend
2019	6.75%	**	4.50%
2020	6.50%	**	4.50%
2021	6.25%	5.00%	4.50%
2022	6.00%	5.00%	4.50%
2023	5.75%	5.00%	4.50%
2024	5.50%	4.75%	4.50%
2025	5.25%	4.75%	4.50%
2026	5.00%	4.75%	4.50%
2027 and beyond	4.75%	4.75%	4.50%

* Includes sliding scale base amounts. Southland Plan and Supplemental Plan claims are trended at 4.50%.

** Initial Medicare claims are set based on scheduled increases through plan year 2022.

The “Annual Increase in Base Contributions Received from Covered Members” details how the expected increase in the amounts contributed from covered retirees and dependents will increase over time. The trend rates are detailed below and apply to the base rate retiree premiums only. The sliding scale premiums are assumed to increase with health care trend. The premiums for surviving dependents are assumed to approximate the assumed claims cost over time.

Annual Increase in Base Contributions Received from Covered Members		
Retiree Share of Premium		Retiree Optional Plans Premium
Pre-Medicare	Medicare Eligible	
2.0%	1.0%	2.0%



Schedule B – Statement of Actuarial Assumptions and Methods

AGE RELATED MORBIDITY: Per capita costs are adjusted to reflect expected cost changes related to age. The increase to the net incurred claims was assumed to be:

Participant Age	Annual Increase*
< 40	0.0%
40 – 44	2.6%
45 – 49	2.6%
50 – 54	3.2%
55 – 59	3.4%
60 – 64	3.7%
65 – 69	3.2%
70 – 74	2.4%
75 – 79	1.8%
80 – 84	1.3%
85 and over	0.0%

**Dental, and Southland Plan costs are not age adjusted.*

ANTICIPATED PLAN PARTICIPATION: Retirees who are eligible for post-employment health benefits may choose to waive coverage or elect full medical, prescription drug and dental coverage, dental coverage only, or Southland optional plans. Those who elect coverage may elect to cover dependents. Current retirees are included in the valuation based on their actual plan and tier elections. Assumptions must be made for actives who will retire in the future. The assumed annual rates of plan participation, spouse coverage, wellness participation and tobacco use for future retirees are as follows. For future retirees who participate in the plan, we assume they all choose full medical, prescription drug and dental coverage. We assume future retirees elect the SEHIP Dental plan.

Medical	Under 65	Over 65
Plan Participation	90% if eligible for immediate retirement 0% if terminating with a deferred benefit.	90% if eligible for immediate retirement 0% if terminating with a deferred benefit.
Wellness	85%	N/A
Tobacco	10%	10%
Spouse Surcharge	10%	10%
Spouse Coverage**		
Male	50%	50%
Female	25%	25%

*** Wives are assumed to be three years younger than husbands.*



Schedule B – Statement of Actuarial Assumptions and Methods

It is assumed that retirees who do not elect to continue their coverage under the SEHIP upon retirement will not enroll during a future open enrollment period. All retirees are assumed to continue their spouse or family coverage at the same level as reported on the valuation date. Future retirees are assumed to maintain spouse or family coverage, if elected, for life.

ANNUAL EXPECTED MEDICAL/PRESCRIPTION DRUGS/DENTAL CLAIMS (AGE 65): Following is a chart detailing expected per member per year medical/prescription drugs, Supplemental Plan and dental claims for pre and post Medicare for the year following the valuation date. Medical and prescription drug claims and Supplemental Plan claims are age-adjusted to age 65, dental claims are not age-adjusted. The SEHIP Vision Plan was determined to be self-financed by retiree contributions and thus no liability was assumed. Medicare eligible rates are based on the self-insured MAPD EGWP projections from BCBS.

	Medical/Prescription Drugs	Dental
Pre-Medicare	\$10,922	\$296
Medicare-Eligible	\$1,207	\$296

MEDICARE ADVANTAGE PREMIUMS: Claims for Medicare-Eligible retirees are set based on scheduled premium rate increases until the 2022 plan year. Premium rates drop beginning with plan year 2021 due to the repeal of the ACA Health Insurer Fee effective January 1, 2021. The following table details expected Medicare Advantage monthly premium rates. Following these three years, monthly premiums are expected to increase with the health care cost trend rates, as described on the previous page.

Medicare Advantage Plan Monthly Premium Rates

Calendar Year	2020	2021	2022
Expected Monthly Premium Rates	\$126.00	\$101.41	\$110.00

ANNUAL EXPECTED OPTIONAL PLAN CLAIMS: Following is a chart detailing expected Southland Plan claims for the year following the valuation date. Southland Plan claims are not age-adjusted. Only retirees who have currently elected the Southland Plan are assumed to elect them in the future. Active employees are assumed to elect the SEHIP BlueCard PPO Medical/Prescription Drug Plan upon retirement.

Vision Plan	Cancer Plan	Hospital Indemnity Plan	Dental
\$73	\$129	\$184	\$457

ACTUARIAL METHOD: Entry age actuarial cost method.

ASSET VALUATION METHOD: Market value.



Schedule B – Statement of Actuarial Assumptions and Methods

STATE EMPLOYEES

SEPARATIONS FROM ACTIVE SERVICE- STATE EMPLOYEES

TERMINATION: Representative values of the assumed annual rates of withdrawal are shown in the following tables:

REGULAR MEMBERS

Annual Rate of Withdrawal

<u>Age</u>	<u>Years of Service</u>							
	<u>0-4</u>		<u>5-9</u>		<u>10-20</u>		<u>20+</u>	
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>
20	24.00%	33.00%	9.00%	12.00%	5.00%	6.50%	1.50%	1.50%
25	19.50	23.00	8.50	11.00	5.00	6.50	1.50	1.50
30	17.50	20.00	7.00	8.25	4.00	5.25	1.50	1.50
35	16.00	18.00	6.50	7.50	3.25	5.25	1.50	1.50
40	15.50	17.00	5.50	7.25	3.00	3.50	1.50	1.50
45	13.50	15.50	5.00	6.50	2.75	3.50	1.50	1.50
50	13.00	14.50	5.00	6.25	2.50	3.50	1.50	1.50
55	11.50	14.00	5.00	5.50	2.50	3.50	1.50	1.50
60	11.50	15.00	5.50	6.00	2.50	3.50	1.50	2.00
65	15.50	16.00	7.50	8.50	2.75	3.50	1.50	2.00
69	15.50	16.00	7.50	8.50	2.75	3.50	1.50	2.00

There are no withdrawal decrements after eligibility for service retirement.

CERTIFIED FIREFIGHTERS, POLICE OFFICERS, OR CORRECTIONAL OFFICERS (FLC MEMBERS)

Annual Rate of Withdrawal

<u>Age</u>	<u>Years of Service</u>			
	<u>0-4</u>	<u>5-9</u>	<u>10-20</u>	<u>20+</u>
20	17.00%	6.50%	3.25%	1.25%
25	14.50	6.50	3.25	1.25
30	13.50	6.00	3.25	1.25
35	13.50	5.50	3.25	1.25
40	13.00	5.00	2.50	1.25
45	12.50	4.50	2.25	1.25
50	11.00	4.50	2.25	1.25
55	10.00	4.50	2.25	1.25
60	12.00	5.50	2.00	1.25
65	17.00	6.00	2.00	1.25
69	17.00	6.00	2.00	1.25

There are no withdrawal decrements after eligibility for service retirement.



Schedule B – Statement of Actuarial Assumptions and Methods

SERVICE RETIREMENT: The assumed annual rates of service retirement are as follows:

REGULAR MEMBERS

<u>Age</u>	<u>Annual Rate</u>			
	<u>TIER I¹</u>		<u>TIER II</u>	
	<u>1ST Eligible</u>	<u>Subsequent</u>	<u>1ST Eligible</u>	<u>Subsequent</u>
50 & Under	18.00%	11.50%		
51 – 56	20.00	11.50		
57	25.00	11.50		
58 – 59	25.00	15.00		
60	13.00	13.00		
61	13.00	13.00		
62	25.00	25.00	50.00%	50.00%
63	25.00	20.00	25.00	20.00
64	25.00	20.00	25.00	20.00
65	35.00	25.00	35.00	25.00
66	35.00	30.00	35.00	30.00
67	35.00	25.00	35.00	25.00
68	35.00	21.00	35.00	21.00
69 – 74	35.00	21.00	35.00	21.00
75 & Above	100.00	100.00	100.00	100.00

¹25% are assumed to retire at age 60 with 25 years of service and 17% are assumed to retire at age 60 with 26 or more years of service.



Schedule B – Statement of Actuarial Assumptions and Methods

FLC MEMBERS

<u>Age</u>	<u>Annual Rate</u>			
	<u>TIER I¹</u>		<u>TIER II</u>	
	<u>1ST Eligible</u>	<u>Subsequent</u>	<u>1ST Eligible</u>	<u>Subsequent</u>
50 & Under	40.00%	25.00%		
51 – 55	40.00	20.00		
56	40.00	20.00	15.00%	15.00%
57 – 59	40.00	17.00	15.00	15.00
60	15.00	15.00	15.00	15.00
61	40.00	18.00	15.00	15.00
62	40.00	28.00	40.00	28.00
63	40.00	28.00	40.00	28.00
64	40.00	21.00	40.00	21.00
65	40.00	25.00	40.00	25.00
66	40.00	40.00	40.00	40.00
67 – 74	40.00	30.00	40.00	30.00
75 & Above	100.00	100.00	100.00	100.00

¹40% are assumed to retire at age 60 with 25 years of service and 20% are assumed to retire at age 60 with 26 or more years of service.



Schedule B – Statement of Actuarial Assumptions and Methods

DEATH AND DISABILITY: Representative values of the assumed annual rates of death and disability are as follows:

STATE EMPLOYEES

<u>Age</u>	Annual Rate of							
	<u>Death</u>		<u>Disability</u>					
			Tier I		Tier II			
			Service < 25		Service >=25			
	Male	Female	Male	Female		Male	Female	
20	0.023%	0.009%	0.060%	0.052%		0.060%	0.052%	
25	0.025	0.010	0.090	0.074		0.090	0.074	
30	0.029	0.012	0.117	0.100		0.117	0.100	
35	0.051	0.022	0.151	0.187		0.151	0.187	
40	0.071	0.033	0.405	0.372		0.405	0.372	
45	0.099	0.053	0.630	0.559	0.250%	0.630	0.559	
50	0.141	0.079	1.155	0.898	0.250	1.155	0.898	
55	0.200	0.114	1.530	1.400	0.250	1.530	1.400	
60	0.297	0.161	0.500	1.000	0.250	0.500	1.000	
65	0.416	0.229	0.500	1.000	0.250	0.500	1.000	
69	0.492	0.286						



Schedule B – Statement of Actuarial Assumptions and Methods

STATE POLICEMEN

<u>Annual Rate of</u>								
<u>Age</u>	<u>Death</u>		<u>Disability</u>	<u>Withdrawal</u>		<u>Retirement</u>		
	<u>Male</u>	<u>Female</u>		<u>Service</u>		<u>Service</u>		
				<u>0-4</u>	<u>5+</u>	<u>10-19</u>	<u>20-24</u>	<u>25+</u>
20	0.023%	0.009%	0.080%	2.00%	1.50%			
25	0.025	0.010	0.100	2.00	1.50			
30	0.029	0.012	0.140	2.00	1.50			
35	0.051	0.022	0.220	2.00	1.00			
40	0.071	0.033	0.340	2.00	1.00			40.00%
45	0.099	0.053	0.460	5.00	1.00			40.00
50	0.141	0.079	0.600	5.00	1.50			40.00
55	0.200	0.114		10.00		5.00%	35.00%	35.00
60	0.297	0.161		10.00		25.00	25.00	25.00
62	0.346	0.183		10.00		25.00	25.00	25.00
65	0.416	0.229				100.00	100.00	100.00

DEATH AFTER RETIREMENT: The rates of mortality for the period after service retirement are according to the sex distinct RP-2000 Blue Collar Mortality Table Projected with Scale BB to 2020 with an adjustment of 125% at all ages for males and 120% for females at ages on and after age 78. The rates of mortality for the period after disability retirement are according to the sex distinct RP-2000 Disabled Retiree Mortality Table Projected with Scale BB to 2020 with an adjustment of 130% at all ages for females. Representative values of assumed mortality are as follows:

<u>Age</u>	<u>Service Retirement</u>		<u>Disability Retirement</u>	
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>
55	0.4939%	0.2528%	3.3375%	1.9456%
60	0.8983	0.4048	3.6532	2.3221
65	1.5257	0.8167	3.9411	2.8618
70	2.4722	1.4637	4.6257	3.8430
75	3.9850	2.4262	6.0659	5.3334
80	6.5180	4.6142	8.0841	7.3840
85	10.6322	7.8329	10.4664	10.2321
90	18.2107	13.1471	14.7009	14.5932



Schedule B – Statement of Actuarial Assumptions and Methods

SALARY INCREASES: Representative values of the assumed rates of future salary increases are as follows:

STATE EMPLOYEES

Service	Annual Rate*
0	5.000 %
1 – 5	4.000
6 – 10	3.750
11 – 15	3.500
16 & Over	3.250

**Includes wage inflation at 3.000% per annum.*

STATE POLICEMEN

4.50% per year for all years of service, including wage inflation at 3.00% per annum.



Schedule B – Statement of Actuarial Assumptions and Methods

JUDICIAL

SEPARATIONS BEFORE RETIREMENT: Representative values of the assumed annual rates of withdrawal, death and disability are as follows:

<u>Age</u>	<u>Annual Rate of</u>			
	<u>Withdrawal</u>	<u>Death*</u>		<u>Disability**</u>
		<u>Male</u>	<u>Female</u>	
30	2.50%	0.0376%	0.0149%	0.020%
35	2.50	0.0655	0.0268	0.040
40	2.50	0.0914	0.0399	0.068
45	2.50	0.1278	0.0635	0.108
50	2.50	0.1812	0.0947	0.163
55	2.50	0.2567	0.1371	0.250
60	2.50	0.3815	0.1929	0.395
64	2.50	0.5070	0.2558	0.570

* Rates of pre-retirement mortality are according to the sex distinct RP-2000 Employee Mortality Table (with the sex distinct RP-2000 Combined Mortality Table for ages over 70) projected with Scale BB to 2020 with an adjustment factor of 90% for males and 60% for females.

**Disability rates turn off at retirement eligibility.

RATES OF RETIREMENT:

Tier I (Groups 1 and 2): Between the ages of 55 and 59, 25% of members are assumed to retire in the year when first eligible and 10% in each year thereafter. Between the ages of 60 and 69, 30% of members are assumed to retire in the year when first eligible and 15% in each year thereafter. 30% of the remaining members are assumed to retire each year between age 70 and 74, and all remaining members are assumed to retire at age 75.

Tier II (Group 3) – Judges, Clerks, and District Attorneys’ Plan:

<u>Age</u>	<u>Judges</u>		<u>Clerks and District Attorneys</u>
	<u>≤18 years</u>	<u>≥18 years</u>	
62 – 69	10%	15%*	10%**
70 – 74	30%	30%	30%
75	100%	100%	100%

* An additional 15% are assumed to retire when first eligible for retirement and at 18 years of service.

**An additional 20% are assumed to retire when first eligible for retirement and at 27 years of service.



Schedule B – Statement of Actuarial Assumptions and Methods

DEATHS AFTER RETIREMENT: Rates of mortality for the period after service retirement are according to the sex distinct RP-2000 White Collar Mortality Table projected to 2020 using scale BB and adjusted 115% for males and 112% for females older than age 78. The sex distinct RP-2000 Disabled Mortality Table is projected to 2020 using scale BB and adjusted 105% for males and 120% for females. Representative values of assumed mortality are as follows:

<u>Age</u>	<u>Service Retirement</u>		<u>Disability Retirement</u>	
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>
55	0.3575%	0.2339%	3.5044%	1.7959%
60	0.5579	0.3825	3.8359	2.1434
65	0.9991	0.6795	4.1382	2.6417
70	1.6384	1.1928	4.8570	3.5474
75	2.8589	2.0200	6.3692	4.9231
80	5.0501	3.7900	8.4883	6.8160
85	8.8966	6.5271	10.9897	9.4450
90	16.4327	11.3249	15.4359	13.4706

SALARY INCREASES: 3.50% per annum for all ages with service less than 14 years, and 3.25% per annum for all ages with service of 14 years or more, compounded annually, including wage inflation at 3.00%.



Schedule B – Statement of Actuarial Assumptions and Methods

TEACHERS

SEPARATIONS BEFORE SERVICE RETIREMENT: Representative values of the assumed annual rates of death, disability, and withdrawal are as follows:

<u>Age</u>	<u>Annual Rate of</u>							
	<u>Death*</u>	<u>Disability**</u>				<u>Withdrawal***</u>		
		<u>Tier I</u>		<u>Tier II</u>		<u>Years of Service</u>		
		<u>Years of Service</u>		<u>Years of Service</u>		<u>Years of Service</u>		
	<u>10-24</u>	<u>25+</u>	<u>10+</u>	<u>0-4</u>	<u>5-9</u>	<u>10-19</u>	<u>20+</u>	
<u>Male</u>								
20	0.0293%	0.0008%		0.0008%	25.00%			
25	0.0319	0.0250		0.0250	14.80	11.00%		
30	0.0376	0.0425		0.0425	13.80	5.40	3.50%	
35	0.0655	0.1300		0.1300	13.50	5.40	2.50	
40	0.0914	0.1700		0.1700	13.00	5.40	2.25	
45	0.1278	0.2700	0.2000%	0.2700	13.00	5.40	2.25	
50	0.1812	0.6000	0.2000	0.6000	12.00	5.00	2.50	
55	0.2567	0.9000	0.2000	0.9000	11.50	5.00	2.50	
60	0.3815	0.5000	0.5000	1.3000	12.00	4.50	2.50	
65	0.5353	0.5000	0.5000	0.5000	12.00	6.00		
69	0.6326	0.5000	0.5000	0.5000	12.00	6.25		
<u>Female</u>								
20	0.0108%	0.0100%		0.0100%	25.00%			
25	0.0117	0.0275		0.0275	12.75	9.00%		
30	0.0149	0.0425		0.0425	13.50	5.80	4.30%	
35	0.0268	0.1000		0.1000	13.50	5.00	2.60	
40	0.0399	0.2000		0.2000	11.50	4.75	2.00	
45	0.0635	0.3500	0.2000%	0.3500	10.75	4.10	2.00	
50	0.0947	0.6500	0.2000	0.6500	10.75	3.90	2.20	
55	0.1371	1.0500	0.2000	1.0500	11.00	4.20	2.40	
60	0.1929	0.5000	0.5000	1.4000	12.00	4.50	2.70	
65	0.2743	0.5000	0.5000	0.5000	15.00	6.75		
69	0.3435	0.5000	0.5000	0.5000	15.00	7.25		

*Rates of pre-retirement mortality are according to the sex distinct RP-2000 Employee Mortality Table (with the sex distinct RP-2000 Combined Mortality Table used for ages over 70) projected with Scale BB to 2020 with an adjustment factor of 90% for males and 60% for females.

**No rates of disability are assumed for members with less than 10 years of service.

***No rates of withdrawal are assumed after eligibility for service retirement.



Schedule B – Statement of Actuarial Assumptions and Methods

SERVICE RETIREMENT:

The assumed annual rates of service retirement for **Tier I** members are as follows:

For Tier I members upon attaining 25 years of service, rates are as follows:

<u>Age Group</u>	<u>Annual Rate</u>	
	<u>Male*</u>	<u>Female**</u>
47 & Under	25.0%	28.0%
48	25.0	20.0
49	20.0	17.0
50	16.5	13.0
51 – 53	16.0	15.0
54	16.0	17.0
55	16.0	18.0
56 – 57	16.0	19.0
58	16.0	21.0
59	20.0	22.0
60	20.0	30.0
61	20.0	27.5
62	35.0	45.0
63	30.0	35.0
64	23.0	32.0
65	28.0	38.0
66	27.0	40.0
67	22.0	35.0
68	22.0	37.0
69 – 70	22.0	30.0
71 – 74	20.0	30.0
75	100.0	100.0

**For males, retirement rates are increased by 5% in the year first attaining 25 years of service from age 51 through age 60.*

***For females, retirement rates are increased by 9% in the year first attaining 25 years of service from age 50 through age 59.*



Schedule B – Statement of Actuarial Assumptions and Methods

For Tier I members first eligible for unreduced benefits before attaining 25 years of service, the rates are as follows:

<u>Age Group</u>	<u>Annual Rate</u>	
	<u>Male</u>	<u>Female</u>
60	12.5%	17.0%
61	11.0	13.5
62	25.0	23.5
63	18.5	18.0
64	15.0	17.0
65	28.0	28.0
66	27.0	28.0
67	22.0	23.0
68	22.0	27.0
69	22.0	22.0
70	22.0	26.0
71 – 74	20.0	24.0
75 & Above	100.0	100.0

The assumed annual rates of service retirement for **Tier II** members are as follows:

<u>Age Group</u>	<u>Annual Rate</u>			
	<u>Male*</u>		<u>Female**</u>	
	<u>Less than 25 years of service</u>	<u>25 or more years of service</u>	<u>Less than 25 years of service</u>	<u>25 or more years of service</u>
62	50.0%	60.0%	50.0%	70.0%
63	18.5	30.0	18.0	35.0
64	15.0	23.0	17.0	32.0
65	28.0	28.0	28.0	38.0
66	27.0	27.0	28.0	40.0
67	22.0	22.0	23.0	35.0
68	22.0	22.0	27.0	37.0
69	22.0	22.0	22.0	30.0
70	22.0	22.0	26.0	30.0
71 – 74	20.0	20.0	24.0	30.0
75 & above	100.0	100.0	100.0	100.0

* For FLC Tier II members, rates on or after age 60 are the same as those for Tier I, while rates from ages 56 to 59 are equal to 0.20 for service less than 25 years and 0.30 for service greater than or equal to 25 years.

** For FLC Tier II members, rates on or after age 60 are the same as those for Tier I, while rates from ages 56 to 59 are equal to 0.20 for service less than 25 years and 0.40 for service greater than or equal to 25 years.



Schedule B – Statement of Actuarial Assumptions and Methods

DEATHS AFTER RETIREMENT: Rates of mortality for the period after service retirement are according to the RP-2000 White Collar Mortality Table projected to 2020 using scale BB and adjusted 115% for all ages for males and 112% for ages 78 and over for females. The rates of disabled mortality were based on the RP-2000 Disabled Mortality Table projected to 2020 using scale BB and adjusted 105% for males and 120% for females. Representative values of assumed mortality are as follows:

Age	Service Retirement		Disability Retirement	
	Male	Female	Male	Female
55	0.3575%	0.2339%	3.5044%	1.7959%
60	0.5579	0.3825	3.8359	2.1434
65	0.9991	0.6795	4.1382	2.6417
70	1.6384	1.1928	4.8570	3.5474
75	2.8589	2.0200	6.3692	4.9231
80	5.0501	3.7900	8.4883	6.8160
85	8.8966	6.5271	10.9897	9.4450
90	16.4327	11.3249	15.4359	13.4706

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases are as follows:

Service	Annual Rate*
0	5.000 %
1 – 5	4.000
6 – 10	3.750
11 – 15	3.500
16 & Over	3.250

**Includes wage inflation at 3.000% per annum.*



Schedule B – Statement of Actuarial Assumptions and Methods

AFFORDABLE CARE ACT: The impact of the Affordable Care Act (ACA) was addressed in this valuation. Review of the information currently available did not identify any specific provisions of the ACA that are anticipated to significantly impact results other than plan design features and fees currently mandated by the ACA and incorporated in the plan designs, which are included in the current baseline claims costs. Continued monitoring of the ACA’s impact on the Plan’s liability will be required.

COVID-19: The impact of the COVID-19 pandemic was considered in this valuation; however, no changes were incorporated at this time due to the level of uncertainty regarding the impact on both plan costs and contribution levels going forward. Given the uncertainty regarding COVID-19 (e.g., the impact of routine care being deferred, direct COVID-19 treatment and prevention costs, changes in contribution and budget projections), continued monitoring of the impact on the Plan’s liability will be required.



Schedule C – Deferred Outflows and Deferred Inflows of Resources

SCHEDULE OF DIFFERENCES BETWEEN EXPECTED AND ACTUAL EXPERIENCE

Year	Difference Between Expected and Actual Experience	Recognition Period (Years)	Increase/(Decrease) in OPEB Expense Arising from the Recognition of the Effects of the Differences Between Expected and Actual Experience							
			2020 - 2021	2021 - 2022	2022 - 2023	2023 - 2024	2024 - 2025	2025 - 2026	Thereafter	
2017 - 2018	\$0	5.37	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2018 - 2019	(\$53,532,069)	5.41	(\$9,895,022)	(\$9,895,022)	(\$9,895,022)	(\$4,056,959)	\$0	\$0	\$0	\$0
2019 - 2020	(\$1,429,779,671)	5.38	(\$265,758,303)	(\$265,758,303)	(\$265,758,303)	(\$265,758,303)	(\$100,988,156)	\$0	\$0	\$0
2020 - 2021	(\$71,679,925)	5.33	(\$13,448,391)	(\$13,448,391)	(\$13,448,391)	(\$13,448,391)	(\$13,448,391)	(\$4,437,970)	\$0	\$0
			(\$289,101,716)	(\$289,101,716)	(\$289,101,716)	(\$283,263,653)	(\$114,436,547)	(\$4,437,970)	\$0	\$0

Year	Experience Losses (a)	Experience Gains (b)	Amounts Recognized in		
			OPEB Expense Through September 30, 2021 (c)	Deferred Outflows of Resources (a) – (c)	Deferred Inflows of Resources (b) + (c)
2017 - 2018	\$0	\$0	\$0	\$0	\$0
2018 - 2019	\$0	\$53,532,069	(\$29,685,066)	\$0	\$23,847,003
2019 - 2020	\$0	\$1,429,779,671	(\$531,516,606)	\$0	\$898,263,065
2020 - 2021	\$0	\$71,679,925	(\$13,448,391)	\$0	\$58,231,534
			(\$574,650,063)	\$0	\$980,341,602



Schedule C – Deferred Outflows and Deferred Inflows of Resources

SCHEDULE OF DIFFERENCES BETWEEN PROJECTED AND ACTUAL EARNINGS ON PLAN INVESTMENTS

Year	Difference Between Projected and Actual Earnings on OPEB Plan Investments	Recognition Period (Years)	Increase/(Decrease) in OPEB Expense Arising from the Recognition of the Differences Between Projected and Actual Earnings on OPEB Plan Investments					
			2020 - 2021	2021 - 2022	2022 - 2023	2023 - 2024	2024 - 2025	Thereafter
2017 - 2018	(\$6,610,352)	5.00	(\$1,322,070)	(\$1,322,072)	\$0	\$0	\$0	\$0
2018 - 2019	(\$3,279,555)	5.00	(\$655,911)	(\$655,911)	(\$655,911)	\$0	\$0	\$0
2018 - 2019	\$7,135,910	5.00	\$1,427,182	\$1,427,182	\$1,427,182	\$1,427,182	\$0	\$0
2020 - 2021	(\$560,747)	5.00	(\$112,149)	(\$112,149)	(\$112,149)	(\$112,149)	(\$112,151)	\$0
			(\$662,948)	(\$662,950)	\$659,122	\$1,315,033	(\$112,151)	\$0

Year	Difference Between Projected and Actual Earnings on OPEB Plan Investments (a)	Amounts Recognized in OPEB Expense Through September 30, 2021 (b)	Amounts of Deferred Resources Outflows/(Inflows) (a) – (b)
2017 - 2018	(\$6,610,352)	(\$5,288,280)	(\$1,322,072)
2018 - 2019	(\$3,279,555)	(\$1,967,733)	(\$1,311,822)
2018 - 2019	\$7,135,910	\$2,854,364	\$4,281,546
2020 - 2021	(\$560,747)	(\$112,149)	(\$448,598)
		(\$4,513,798)	\$1,199,054



Schedule C – Deferred Outflows and Deferred Inflows of Resources

SCHEDULE OF CHANGES OF ASSUMPTION

Increase/(Decrease) in OPEB Expense Arising from the Recognition of the Effects of Assumption Changes									
Year	Assumption Changes	Recognition Period (Years)	2020 - 2021	2021 - 2022	2022 - 2023	2023 - 2024	2024 - 2025	2025 - 2026	Thereafter
2017 - 2018	(\$373,573,542)	5.37	(\$69,566,768)	(\$69,566,768)	(\$25,739,702)	\$0	\$0	\$0	\$0
2018 - 2019	(\$318,988,284)	5.41	(\$58,962,714)	(\$58,962,714)	(\$58,962,714)	(\$24,174,714)	\$0	\$0	\$0
2018 - 2019	\$156,524,663	5.38	\$29,093,804	\$29,093,804	\$29,093,804	\$29,093,804	\$11,055,643	\$0	\$0
2020 - 2021	(\$721,135,114)	5.33	(\$135,297,395)	(\$135,297,395)	(\$135,297,395)	(\$135,297,395)	(\$135,297,395)	(\$44,648,139)	\$0
			(\$234,733,073)	(\$234,733,073)	(\$190,906,007)	(\$130,378,305)	(\$124,241,752)	(\$44,648,139)	\$0

Amounts Recognized in						
Year	Assumption Losses (a)	Assumption Gains (b)	OPEB Expense Through September 30, 2021 (c)	Deferred Outflows of Resources (a) – (c)	Deferred Inflows of Resources (b) + (c)	
2017 - 2018	\$0	\$373,573,542	(\$278,267,072)	\$0	\$95,306,470	
2018 - 2019	\$0	\$318,988,284	(\$176,888,142)	\$0	\$142,100,142	
2018 - 2019	\$156,524,663	\$0	\$58,187,608	\$98,337,055	\$0	
2020 - 2021	\$0	\$721,135,114	(\$135,297,395)	\$0	\$585,837,719	
			(\$532,265,001)	\$98,337,055	\$823,244,331	



Schedule C – Deferred Outflows and Deferred Inflows of Resources

	Net Increase/(Decrease) in OPEB Expense						
	2020 - 2021	2021 - 2022	2022 - 2023	2023 - 2024	2024 - 2025	2025 - 2026	Thereafter
Differences between Expected and Actual Experience	(\$289,101,716)	(\$289,101,716)	(\$289,101,716)	(\$283,263,653)	(\$114,436,547)	(\$4,437,970)	\$0
Changes of Assumptions	(\$234,733,073)	(\$234,733,073)	(\$190,906,007)	(\$130,378,305)	(\$124,241,752)	(\$44,648,139)	\$0
Differences between Projected and Actual Earnings on OPEB Plan Investments	(\$662,948)	(\$662,950)	\$659,122	\$1,315,033	(\$112,151)	\$0	\$0
Grand Total	(\$524,497,737)	(\$524,497,739)	(\$479,348,601)	(\$412,326,925)	(\$238,790,450)	(\$49,086,109)	\$0