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GASB STATEMENT NO. 74 REPORT

For the Alabama State Employees' Health Insurance Plan

PREPARED AS OF SEPTEMBER 30, 2020





Cavanaugh Macdonald

CONSULTING, LLC

The experience and dedication you deserve

December 9, 2020

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. 74 for the Retired Trust. The information is presented for the one-year period ending September 30, 2020. These calculations have been made on a basis that is consistent with our understanding of these accounting standards.

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 Retirement System of Alabama and the SEHIP 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.

Our calculation of the liability associated with the benefits described in this report was performed for the purpose of providing reporting and disclosure information that satisfies the requirements of GASB Statement No. 74. The calculation of the plan's liability for this report may not be applicable for funding purposes of the plan. A calculation of the plan's liability for purposes other than satisfying the requirements of GASB No. 74 may produce significantly different results.



State Employees' Insurance Board

December 9, 2020

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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
Senior Actuary

AB: jf



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Section I – Summary of Principal Results

**REPORT OF THE ANNUAL GASB STATEMENT NO. 74
REQUIRED INFORMATION FOR THE
ALABAMA STATE EMPLOYEES' HEALTH INSURANCE PLAN**

PREPARED AS OF SEPTEMBER 30, 2020

Valuation Date (VD):	September 30, 2019	September 30, 2018
Prior Measurement Date:	September 30, 2019	September 30, 2018
Measurement Date (MD):	September 30, 2020	September 30, 2019
Membership Data as of Valuation Date:		
Retired Members Currently Receiving Benefits	21,558	21,323
Surviving Spouses Currently Receiving Benefits	1,594	1,642
Inactive Members Entitled to Benefits but Not Yet Receiving	1,110	991
Active Members	<u>31,439</u>	<u>32,133</u>
Total Membership	55,701	56,089
Discount Rate:		
Long-Term Expected Rate of Return	7.50%	7.50%
Municipal Bond Index Rate at Measurement Date	2.25%	3.00%
Municipal Bond Index Rate at Prior Measurement Date	3.00%	4.18%
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%
Single Equivalent Interest Rate at Prior Measurement Date	3.63%	4.25%
Net OPEB Liability:		
Total OPEB Liability (TOL)	\$ 1,198,800,670	\$ 1,920,611,110
Fiduciary Net Position (FNP)	<u>205,730,389</u>	<u>190,855,481</u>
Net OPEB Liability (NOL = TOL – FNP)	\$ 993,070,281	\$ 1,729,755,629
FNP as a percentage of TOL	17.16%	9.94%



Section II – Introduction

The Governmental Accounting Standards Board (GASB) issued Statement No. 74 (GASB 74), “*Financial Reporting for Postemployment Benefit Plans other than Pension Plans*,” in June 2015. The effective date for reporting under GASB 74 is plan years beginning after June 15, 2016, but early implementation is encouraged. This report has been prepared as of September 30, 2020 (the Measurement Date) to assist the Alabama State Employees’ Health Insurance Plan (Plan) in better understanding the requirements of GASB 74 and to identify the information to be provided by the Plan’s actuary, Cavanaugh Macdonald Consulting (CMC). Much of the material provided in this report is based on the data, assumptions, and results of the annual actuarial valuation of the Plan as of September 30, 2019.

GASB 74 requires the determination of the Total OPEB Liability (TOL) utilizing the Entry Age Normal actuarial cost method. The Net OPEB Liability (NOL) is then set equal to the TOL minus the Plan’s Fiduciary Net Position (FNP) (basically the market value of assets). The benefit provisions recognized in the calculation of the TOL are summarized in Schedule B.

Among the assumptions needed for the liability calculation is a Single Equivalent Interest Rate (SEIR), as described by GASB 74. 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 74.

The sections that follow provide the results of all the necessary calculations, presented in the order laid out in GASB 74 for note disclosure and Required Supplementary Information (RSI).



Section III – Financial Statement Notes

The actuarial related information presented herein will follow the order presented in GASB 74. Paragraph numbers are provided for ease of reference.

Paragraphs 34.a. (1)-(3): This information will be supplied by the Plan.

Paragraph 34.a. (4): The data required regarding the membership of the Plan were furnished by SEHIP and the Retirement System of Alabama. The following table summarizes the membership of the Fund as of September 30, 2019, the date of the valuation used to determine the September 30, 2020 Total OPEB Liability.

Membership

	Total Number
Retired Members Currently Receiving Benefits	21,558
Surviving Spouses Currently Receiving Benefits	1,594
Inactive Members Entitled To But Not Yet Receiving Benefits	1,110
Active Members	31,439
Total	55,701

Paragraphs 34.a. (5)-(6) and Paragraphs 34.b.-e.: This information will be supplied by the Plan.



Section III – Financial Statement Notes (continued)

Paragraphs 35.a. (1)-(4): As stated earlier, the NOL is equal to the TOL minus the FNP. That result, as of September 30, 2020, is presented in the following table.

	Fiscal Year Ending September 30	
	<u>2020</u>	
Total OPEB Liability	\$	1,198,800,670
Fiduciary Net Position		<u>205,730,389</u>
Net OPEB Liability	\$	993,070,281
Ratio of Fiduciary Net Position to Total OPEB Liability		17.16%

Paragraph 35.b.: 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 and Local 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%



Section III – Financial Statement Notes (continued)

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.*

Mortality

State and Local 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.



Section III – Financial Statement Notes (continued)

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.

The long-term expected return on plan assets is to be reviewed as part of regular experience studies prepared every five years, in conjunction with similar analysis for the Retirement System of Alabama. Several factors should be considered in evaluating the long-term rate of return assumption, including long-term historical data, estimates inherent in current market data, and a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected return, net of investment expense and inflation), as developed for each major asset class. These ranges should be combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and then adding expected inflation. The assumption is intended to be a long-term assumption and is not expected to change absent a significant change in the asset allocation, a change in the inflation assumption, or a fundamental change in the market that alters expected returns in future years.

The target asset allocation and best estimates of expected geometric real rates of return for each major asset class are to be summarized in a manner suggested by 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*



Section III – Financial Statement Notes (continued)

Discount rate (SEIR). For the purpose of this report, we have determined that a discount rate of 7.50% as of September 30, 2020 meets the requirements of GASB 74.

Paragraph 35.b.(1)

Sensitivity analysis: Disclosure of the sensitivity of the Net OPEB Liability to changes in the healthcare cost trend rate. The following presents the Net OPEB Liability of the Fund, calculated using the current healthcare trend rates, as well as the Net OPEB Liability calculated using healthcare trend rates that are 1-percentage-point lower or 1-percentage-point higher than the current rates:

	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 35.b.(2)

- (a) **Discount rate (SEIR).** The discount rate used to measure the Total OPEB Liability 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 (continued)

Assumed asset allocation: The target asset allocation and best estimates of geometric real rates of return are as follows:

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	5.8%	1.50%
Total	100.0%	

*Geometric mean, includes 2.50% inflation

(f) Sensitivity analysis: This paragraph requires disclosure of the sensitivity of the Net OPEB Liability to changes in the discount rate. The following presents the Net OPEB Liability, calculated using the discount rate of 7.50%, as well as the Net OPEB Liability 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 (continued)

Paragraph 35.c.: 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 *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		<u>(721,135,114)</u>
(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 IV – Required Supplementary Information

There are several tables of Required Supplementary Information (RSI) that need to be included in the Plan's financial statements. Paragraph numbers are provided for ease of reference.

Paragraphs 36.a.-c.: The required tables of schedules are provided in Schedule A.

Paragraph 36.d. and 37: The required schedule presenting the annual money-weighted rates of return is to be supplied by the Plan.

Paragraph 38: The following information should be noted regarding the RSI, particularly for the *Schedule of Employer Contributions*:

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



Section IV – Required Supplementary Information (continued)

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.*



Schedule A – Required Supplementary Information Tables

**SCHEDULE OF CHANGES IN THE NET OPEB LIABILITY
GASB 74 Paragraph 36.a.**

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Total OPEB Liability										
Service Cost	\$ 113,584,851	\$ 92,850,947	\$ 49,012,454	\$ 56,664,882						
Interest	104,580,656	118,485,629	129,729,955	68,730,982						
Benefit changes	0	0	0	0						
Difference between expected and actual experience	0	(53,532,069)	(1,429,779,671)	(71,679,925)						
Changes of assumptions	(373,573,542)	(318,988,284)	156,524,663	(721,135,114)						
Benefit payments	(92,372,830)	(80,536,674)	(74,691,645)	(54,391,265)						
Refunds of contributions	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>						
Net change in Total OPEB Liability	\$ (247,780,865)	\$ (241,720,451)	\$ (1,169,204,244)	\$ (721,810,440)						
Total OPEB Liability - beginning	\$ 3,579,316,670	\$ 3,331,535,805	\$ 3,089,815,354	\$ 1,920,611,110						
Total OPEB Liability - ending (a)	\$ 3,331,535,805	\$ 3,089,815,354	\$ 1,920,611,110	\$ 1,198,800,670						
Plan Fiduciary Net Position (Estimated)										
Contributions – employer	\$ 92,790,140	\$ 80,608,921	\$ 74,781,414	\$ 54,480,012						
Contribution - non-employer	0	0	0	0						
Contributions – member	0	0	0	0						
Net investment income	17,889,466	15,900,379	6,677,443	14,874,908						
Benefit payments*	(92,372,830)	(80,536,674)	(74,691,645)	(54,391,265)						
Administrative expense	(417,310)	(72,247)	(89,769)	(88,747)						
Refund of contributions	0	0	0	0						
Other	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>						
Net change in Plan Fiduciary Net Position	\$ 17,889,466	\$ 15,900,379	\$ 6,677,443	\$ 14,874,908						
Plan Fiduciary Net Position – beginning	\$ 150,388,193	\$ 168,277,659	\$ 184,178,038	\$ 190,855,481						
Plan Fiduciary Net Position - ending (b)	168,277,659	184,178,038	190,855,481	205,730,389						
Net OPEB Liability - ending (a) - (b)	\$ 3,163,258,146	\$ 2,905,637,316	\$ 1,729,755,629	\$ 993,070,281						

*Benefit payments are net of member contributions.



Schedule A – Required Supplementary Information Tables (continued)

**SCHEDULE OF THE NET OPEB LIABILITY
GASB 74 Paragraph 36.b.**

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Total OPEB Liability	\$ 3,331,535,805	\$ 3,089,815,354	\$ 1,920,611,110	\$ 1,198,800,670						
Plan Fiduciary Net Position	<u>168,277,659</u>	<u>184,178,038</u>	<u>190,855,481</u>	<u>205,730,389</u>						
Net OPEB Liability	\$ 3,163,258,146	\$ 2,905,637,316	\$ 1,729,755,629	\$ 993,070,281						
Plan Fiduciary Net Position as a percentage of the Total OPEB Liability	5.05%	5.96%	9.94%	17.16%						
Covered-employee payroll	\$ 1,556,807,444	\$ 1,536,660,536	\$ 1,540,200,949	\$ 1,653,317,989						
Net OPEB Liability as a percentage of covered-employee payroll	203.19%	189.09%	112.31%	60.07%						



Schedule A – Required Supplementary Information Tables (continued)

SCHEDULE OF EMPLOYER CONTRIBUTIONS
GASB 74 Paragraph 36.c.
(\$ in Thousands)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Actuarially determined employer contribution	\$201,465	\$164,756	\$170,136	\$109,036						
Actual employer contributions	<u>92,790</u>	<u>80,609</u>	<u>74,781</u>	<u>54,480</u>						
Annual contribution deficiency (excess)	108,675	84,147	95,355	54,556						
Covered-employee payroll	\$1,556,807	\$1,536,661	\$1,540,201	\$1,653,318						
Actual contributions as a percentage of covered-employee payroll	5.96%	5.25%	4.86%	3.30%						



Schedule B – Summary of Main Benefit Provisions

**SUMMARY OF BENEFIT PROVISIONS VALUED
AS INTERPRETED FOR VALUATION PURPOSES**

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, the Teachers' Retirement System of Alabama.

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.

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.



Schedule B – Summary of Main Benefit Provisions (continued)

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 B – Summary of Main Benefit Provisions (continued)

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 B – Summary of Main Benefit Provisions (continued)

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.	\$200 per admission deductible with pre-certification. Covered at 80% of the allowance.
	All hospital admissions require pre-admission certification except maternity.	
Outpatient Hospital Benefits	Most services covered at 100%, subject to co-pay.	Most services covered at 80%, subject to deductible.
	In Alabama, outpatient benefits for non-member hospitals are available only in cases of accidental injury.	
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 C – Statement of Actuarial Assumptions and Methods

OUTLINE 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 costs 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 C – Statement of Actuarial Assumptions and Methods (continued)

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.

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.



Schedule C – Statement of Actuarial Assumptions and Methods (continued)

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 C – Statement of Actuarial Assumptions and Methods (continued)

STATE AND LOCAL EMPLOYEES

SEPARATIONS FROM ACTIVE SERVICE- STATE AND LOCAL EMPLOYEES

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

REGULAR MEMBERS

Annual Rate of Withdrawal*

Age	Years of Service							
	0-4		5-9		10-20		20+	
	Male	Female	Male	Female	Male	Female	Male	Female
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*

Age	Years of Service			
	0-4	5-9	10-20	20+
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.

* For local employers with fewer than 25 employees the rates are multiplied by 50%.



Schedule C – Statement of Actuarial Assumptions and Methods (continued)

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

REGULAR MEMBERS

<u>Age</u>	<u>Annual Rate¹</u>			
	<u>TIER I²</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

¹For local employers with fewer than 25 employees we assume that all members retire upon first eligibility for a service retirement benefit.

²25% 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 C – Statement of Actuarial Assumptions and Methods (continued)

FLC MEMBERS

Age	Annual Rate ¹			
	TIER I ²		TIER II	
	1 ST Eligible	Subsequent	1 ST Eligible	Subsequent
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

¹For local employers with fewer than 25 employees we assume that all members retire upon first eligibility for a service retirement benefit.

²40% 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 C – Statement of Actuarial Assumptions and Methods (continued)

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

STATE EMPLOYEES

Age	Annual Rate of							
	Death		Disability					
			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						

LOCAL EMPLOYEES

Age	Annual Rate of							
	Death		Disability					
			Tier I		Tier II			
			Service < 25		Service >=25			
	Male	Female	Male	Female		Male	Female	
20	0.023%	0.009%	0.040%	0.040%		0.040%	0.040%	
25	0.025	0.010	0.060	0.057		0.060	0.057	
30	0.029	0.012	0.078	0.077		0.078	0.077	
35	0.051	0.022	0.101	0.144		0.101	0.144	
40	0.071	0.033	0.270	0.286		0.270	0.286	
45	0.099	0.053	0.500	0.430	0.250%	0.500	0.430	
50	0.141	0.079	0.900	0.691	0.250	0.900	0.691	
55	0.200	0.114	1.400	1.000	0.250	1.400	1.000	
60	0.297	0.161	0.500	0.250	0.250	2.000	1.000	
65	0.416	0.229	0.500	0.250	0.250	0.500	0.250	
69	0.492	0.286						



Schedule C – Statement of Actuarial Assumptions and Methods (continued)

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 C – Statement of Actuarial Assumptions and Methods (continued)

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

STATE AND LOCAL 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 C – Statement of Actuarial Assumptions and Methods (continued)

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 C – Statement of Actuarial Assumptions and Methods (continued)

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 C – Statement of Actuarial Assumptions and Methods (continued)

TEACHERS

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

Age	Annual Rate of						
	Death*	Disability**			Withdrawal***		
		Tier I	Tier II		Years of Service		
		Years of Service			Years of Service		
	10-24	25+	10+	0-4	5-9	10-19	20+
Male							
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	
Female							
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 C – Statement of Actuarial Assumptions and Methods (continued)

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 C – Statement of Actuarial Assumptions and Methods (continued)

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 C – Statement of Actuarial Assumptions and Methods (continued)

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:

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

<u>Service</u>	<u>Annual Rate*</u>
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 C – Statement of Actuarial Assumptions and Methods (continued)

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 D – Actuarial Cost Method

1. The valuation is prepared on the projected benefit basis, under which the present value, at the interest rate assumed to be earned in the future (currently 7.50%), of each participant's expected retiree health benefit at retirement or death is based on his age and service. The calculations take into account the probability of a participant's death or termination of employment prior to becoming eligible for a benefit, as well as the probability of his terminating with a service, disability or survivor's benefit. The present value of the expected benefits payable on account of the active participants is added to the present value of the expected future payments to retired participants and beneficiaries to obtain the present value of all expected benefits payable from the Plan on account of the present group of participants and beneficiaries.
2. The contributions required to support the benefits of the Plan are determined following a level funding approach, and consist of a normal contribution and an accrued liability contribution.
3. The normal contribution is determined using the "entry age normal" method. Using this method, a calculation is made to determine the uniform and constant percentage rate of employer contribution which, if applied to the compensation of each participant during the entire period of his anticipated covered service, would be required in addition to the contributions of the participant to meet the cost of all benefits payable on his behalf.
4. The present value of future unfunded accrued liability contributions is determined by subtracting the present value of prospective normal contributions together with the current assets held, from the present value of expected benefits to be paid from the Plan.