Illinois State Employees Group Insurance Program

GASB Statement No. 75 Accounting and Financial Reporting for Postemployment Benefits Other than Pensions

Actuarial Valuation Report as of June 30, 2021





October 28, 2022

Illinois Department of Central Management Services 401 South Spring Street Springfield, Illinois 62706

Subject: GASB Statement No. 75 Actuarial Valuation as of June 30, 2021, for Illinois SEGIP

Submitted in this report are the results of the GASB Statement No. 75 actuarial valuation as of June 30, 2021, of the liabilities associated with the employer financed retiree health benefits provided through Illinois State Employees Group Insurance Program (SEGIP). SEGIP provides group insurance benefits to eligible active state employees, and postemployment benefits to eligible retired members receiving pension benefits under the following retirement systems:

- State Employees' Retirement System of Illinois (SERS);
- State Universities Retirement System of Illinois (SURS) but not receiving retiree healthcare benefits through the College Insurance Program (CIP);
- Teachers' Retirement System of Illinois (TRS) but not receiving retiree healthcare benefits through the Teachers' Retirement Insurance Program (TRIP);
- Judges' Retirement System of Illinois (JRS); and
- General Assembly Retirement System (GARS).

This report was prepared at the request of the Department of Central Management Services (CMS) and is intended for use by CMS and those designated or approved by CMS. This report may be provided to other parties only in its entirety and only with the permission of CMS.

The actuarial valuation as of June 30, 2021, was prepared for purposes of complying with the requirements of Statement No. 75 of the Governmental Accounting Standards Board (GASB). The calculations reported herein have been made on a basis consistent with our understanding of this accounting standard. Determinations of the liability associated with the benefits described in this report for purposes other than satisfying the financial reporting requirements of SEGIP and participating employers may produce significantly different results. The actuarial valuation was based upon:

- Census information as of June 30, 2021, provided by SERS, SURS, TRS, JRS, and GARS;
- Healthcare data and census data as of June 30, 2021, for SEGIP as provided by the Department of Central Management Services (CMS);
- Average per member costs by plan type for the period June 30, 2021, through June 30, 2022, reviewed by the State's healthcare actuary and provided by CMS;
- Incurred but not paid liability information provided by CMS;
- The Aetna MAPD plan which becomes effective on January 1, 2023, and is based on zero premiums over at least the next five years;



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- Substantive plan information provided by each respective retirement system SERS, SURS, TRS, JRS, GARS, and CMS;
- Economic assumptions approved by the State, including a discount rate of 1.92 percent as of June 30, 2021, and 3.69 percent as of June 30, 2022, which comply with the requirements of GASB Statement No. 75 (GASB No. 75);
- An ultimate trend rate assumption of 4.25 percent;
- Other healthcare-related assumptions recommended by GRS and approved by the State; and
- Demographic assumptions consistent with the actuarial valuations as of June 30, 2021, for each respective retirement system.

We checked for internal and year-to-year consistency, but did not audit the data. We are not responsible for the accuracy or completeness of the information provided by the retirement systems or CMS. Authorization of the assumptions and methods applicable to this actuarial valuation was granted by the State, and they are disclosed in the actuarial assumptions and methods section of this report.

The Total OPEB Liability and Annual OPEB Expense were developed in accordance with the requirements of GASB No. 75, and are applicable only for financial reporting purposes. The Net OPEB Liability, annual OPEB Expense, Annual Required Contribution, and the expected benefits disclosed in this report should not be used to assess the level of plan assets needed to settle the plan's benefit obligations or the pay-as-you go contributions for current and future years.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to factors such as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; and changes in plan provisions or applicable law. Due to the limited scope of the actuary's assignment, the actuary did not perform an analysis of the potential range of such future measurements.

This report was prepared using our proprietary valuation model and related software which, in our professional judgment, has the capability to provide results that are consistent with the purposes of the valuation. We performed tests to ensure that the model reasonably represents that which is intended to be modeled. We are relying on the GRS actuaries and Internal Software, Training, and Processes Team who developed and maintain the model.

The signing actuaries are independent of the plan sponsor.

To the best of our knowledge, the information contained in this report is accurate and fairly presents the actuarial position of SEGIP as of the valuation date. All calculations have been made in conformity with generally accepted actuarial principles and practices, with the Actuarial Standards of Practice issued by the Actuarial Standards Board and with applicable statutes.



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Alex Rivera and Abra D. Hill 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.

Respectfully submitted,

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SECTION A

EXECUTIVE SUMMARY

Introduction

The Governmental Accounting Standards Board (GASB) has issued accounting standard, Statement No. 75, relating to Other Postemployment Benefits (OPEB). For participating members of the Illinois State Employees Group Insurance Program (SEGIP), OPEB primarily includes medical, prescription drug, dental, vision, and life insurance benefits provided to eligible retired members. Any other OPEB offered to retired State of Illinois employees are outside the scope of this report.

The purpose of this report is to provide (a) results of the actuarial calculations necessary for financial reporting pursuant to GASB Statement No. 75 and (b) various other actuarial, statistical, and benefit information useful to management for the operation of SEGIP.

State contributions are made primarily from the General Revenue Fund on a pay-as-you-go basis and no separate trust has been established for the pre-funding of SEGIP OPEB. The State recognizes SEGIP OPEB benefits as a single employer defined benefit plan as defined in GASB Statement No. 75.

Funded and Unfunded Plans

Currently, benefits offered through SEGIP are financed through a combination of retiree premiums, State, contributions, and subsidies from the Federal Government. The retiree's share of the premium depends on eligible service earned as of the retirement date, coverage elected, and Medicare eligibility. The Federal Government provides a Medicare Part D subsidy. The State finances the remainder of program costs not covered by the retiree's premium or the Federal Government subsidy.

The current objective is to finance program costs in order to provide benefits with appropriate margins for incurred but not paid liabilities. There is no arrangement into which the employer would make contributions to advance-fund the obligation. Benefit obligations are effectively funded on a pay-as-you-go basis.

Consequently, according to GASB Statements No. 74 and 75, the discount rate used to calculate the present values and costs of the OPEB, for programs funded on a pay-as-you-go basis, should be consistent with an index of high quality 20-year general obligation bonds as of the measurement date. For this purpose, the plan sponsor has selected an interest discount rate of 1.92 percent as of June 30, 2021, and 3.69 percent as of June 30, 2022.

There is no current requirement by State or Federal statute or regulation to pre-fund the OPEB obligations with real cash in a Trust. GASB Statements No. 74 and 75 only require the measurement and recognition of the Net OPEB Liability, Annual OPEB Expense, and disclosure in the financial statements, as applicable.

Results of the Study

The actuarial valuation as of June 30, 2021, for purposes of financial reporting under GASB Statement No. 75 requires:

• If benefits are funded on a pay-as-you-go basis, a discount rate based on the expected return for an index of high-quality 20-year general obligation bonds. For this purpose, the sponsor selected a discount rate of 1.92 percent as of June 30, 2021, and 3.69 percent as of June 30, 2022.



• The Entry Age Normal cost method.

The following table shows a reconciliation of the Actuarial Accrued Liability since the last actuarial valuation:

Reconciliation of the Chang	e in Actuarial Accrued Liability	. as of June 30. 2021
		,

\$ 34,911,897,307
\$ 91,504,652
(5,766,830,436)
(245,927,892)
(23,689,880)
(8,286,062,785)
 (3,684,850,880)
\$ (17,915,857,221)

Actuarial Accrued Liability at June 30, 2021, at 3.69% ^a \$ 16,996,040,086

^{*a*} Includes \$309,104,274 in incurred but not paid liability as of June 30, 2021.

^b From the actuarial valuation as of June 30, 2020.

The Actuarial Accrued Liability as of June 30, 2021, using a discount rate of 3.69 percent, is projected to June 30, 2022, for GASB Statement No. 75 financial reporting.

Liabilities decreased more than expected due to the following reasons:

- Favorable MAPD premium rates including expected zero premium rates from 2023 to 2028, and significantly reduced MAPD premium rates after 2028;
- Favorable claims and premium experience for fiscal year end June 30, 2021, compared with assumed trend rates from the previous actuarial valuation;
- Change in OPEB-related assumptions including updates to participation and lapse rates;
- Increase in discount rate from 1.92 percent to 3.69 percent; and

Liabilities also decreased due to pension-related assumption changes and increased slightly due to demographic losses.



Actuarial Assumptions

In any long-term actuarial valuation (such as for Pensions and OPEBs), certain demographic, economic, and behavioral assumptions are made concerning the population, the investment and discount rates, and the benefits provided. These actuarial assumptions form the basis for the actuarial model which is used to project the future population, the future benefits provided, and the future contributions collected. The discount rate assumption is used to discount projected net OPEB benefits to a present value. This and other related present values are used to calculate the Service Cost, OPEB Expense, and Total OPEB Liability that will be disclosed in the State's financial statements.

This actuarial valuation of SEGIP is similar to the actuarial valuation performed for the pension plan systems sponsored by the State. The demographic assumptions (rates of retirement, termination, disability, and mortality) and economic assumptions (general inflation, wage inflation, and salary increases) used in this June 30, 2021, OPEB valuation were consistent with those used in the June 30, 2021, pension valuations for SERS, SURS, TRS, JRS, and GARS. The following OPEB-related assumption changes were made since the last actuarial valuation as of June 30, 2020:

- Per capita claim costs for plan year end June 30, 2022, were updated based on projected claims and enrollment experience through June 30, 2022, and updated premium rates through plan year 2023.
- Effective as of January 1, 2023, projected per capita costs reflect the newly established zero premium MAPD plan. Based on discussions with CMS, the MAPD costs are zero for calendar years 2023 through 2027, increase to \$42 per member per month in calendar year 2028, and increases ratably to \$102 per member per month in calendar year 2032. After 2032, costs increase according to the assumed trend rates.
- The healthcare trend assumptions were updated based on claim and enrollment experience through June 30, 2021, projected plan cost for plan year end June 30, 2022, premium changes through plan year end 2023, and expectation of future trend increases after June 30, 2022.
- Healthcare plan participation rates by plan were updated based on observed experience.
- The discount rate was changed from 1.92 percent at June 30, 2021, to 3.69 percent at June 30, 2022.

The pension-related assumptions for SURS and TRS were updated since the last actuarial valuation as of June 30, 2020. The pension-related assumptions for SERS, GARS, and JRS have not changed since the last OPEB actuarial valuation as of June 30, 2020.



Actuarial Cost Methods

The actuarial valuation results are based on the Entry Age Normal cost method as required by GASB Statement No. 75.

The remainder of the report is an integral component of the actuarial valuation and includes:

- Key actuarial valuation results;
- An overview of the GASB Statement No. 75 requirements;
- Additional actuarial valuation exhibits and financial disclosure required under GASB Statement No. 75; and
- Summary of actuarial assumptions and methods and plan provisions.



SECTION B

ACTUARIAL VALUATION RESULTS

The following section shows actuarial valuation results as of June 30, 2021, projected to June 30, 2022, using two alternative discount rates of 1.92 percent and 3.69 percent.

Plan benefits are funded based on a pay-as-you-go policy. The current funding policy includes revenues from three sources: current retirees, the State, and the Medicare Part D subsidy from the Federal Government. Certain retirees and dependents contribute a portion of the premium to participate in the program. All liability and expense numbers throughout the report are net of the retiree's share of premiums.

The unfunded actuarial accrued liability represents the portion of the total actuarial present value of all future employer-provided benefits which is attributable to prior years, minus any actuarial valuation assets. It represents a measure of the unfunded accrued liability allocable to past service for benefits expected to be paid in the future. The cost and liabilities shown in the following pages are employer costs and liabilities, net of any co-pays, deductibles, retiree coinsurance, or retiree contributions using the Entry Age Normal cost method.



Summary of Actuarial Valuation Results as of June 30, 2021

i i i i ai y	of Actuarial valuation results as of June 30, 2021						Discount Nuce	1.5270
					Ultimate Tre	end	Pre-Medicare	4.25%
					Ultimate Trei	nd P	Post-Medicare	4.25%
A)	Actuarial Accrued Liability (AAL) at June 30, 2021	SERS	SURS	TRS	GARS		JRS	Total
	i) Actives ^a	\$ 6,500,939,441	\$ 2,223,689,371	\$ 280,494,262	\$ 7,563,184	\$	46,289,455	\$ 9,058,975,713
	ii) Retirees and their covered dependents ^b	5,892,628,200	3,541,000,682	107,021,345	30,284,574		84,759,578	9,655,694,379
	iii) Deferred vesteds ^b	505,380,042	1,089,147,153	17,020,605	10,983,658		1,704,182	1,624,235,640
	iv) Deferred vesteds under TRS $^{\circ}$	-	-	32,880,960	-		-	32,880,960
	v) Incurred But Not Paid (IBNP) liability	 193,894,791	108,126,632	3,321,171	941,700		2,819,979	309,104,274
	vi) Total	\$ 13,092,842,474	\$ 6,961,963,839	\$ 440,738,343	\$ 49,773,116	\$	135,573,194	\$ 20,680,890,966
B)	Market Value of Assets	\$ -	\$ -	\$ -	\$ -	\$	-	\$ -
C)	Unfunded Actuarial Accrued Liability (UAAL)	\$ 13,092,842,474	\$ 6,961,963,839	\$ 440,738,343	\$ 49,773,116	\$	135,573,194	\$ 20,680,890,966
D)	Funded Ratio: [B / A]	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%
E)	UAAL as a percentage of covered payroll	284.6%	198.7%	218.0%	499.3%		69.2%	243.0%
F)	Net Normal Cost	\$ 630,768,177	\$ 317,162,514	\$ 25,627,375	\$ 1,304,384	\$	6,244,930	\$ 981,107,380
G)	Estimated FYE 2022 Benefit Payments	\$ 565,215,965	\$ 315, 196, 187	\$ 9,681,430	\$ 2,745,118	\$	8,220,423	\$ 901,059,123
H)	Contributions for IBNP Liability	\$ 112,841,883	\$ 62,926,976	\$ 1,932,838	\$ 548,046	\$	1,641,157	\$ 179,890,899
I)	Interest Cost	\$ 257,014,918	\$ 136,146,502	\$ 8,843,255	\$ 949,224	\$	2,628,687	\$ 405,582,586
J)	Change in IBNP Liability	\$ (74,342,064)	\$ (41,457,313)	\$ (1,273,385)	\$ (361,062)	\$	(1,081,221)	\$ (118,515,044)
К)	Projected Actuarial Accrued Liability at June 30, 2022	\$ 13,228,225,657	\$ 6,995,692,379	\$ 462,321,320	\$ 48,372,499	\$	133,504,010	\$ 20,868,115,866
L)	Incurred FYE 2022 Benefit Payments ^f	\$ 607,540,888	\$ 338,798,942	\$ 10,406,402	\$ 2,950,680	\$	8,835,991	\$ 968,532,903
M)	Participant Information							
	i) Number of Covered Participants							
	a) Active employees ^a	60,257	46,325	2,455	120		935	110,092
	 b) Current retirees with coverage or stipend ^d 	52,965	30,867	1,022	282		864	86,000
	c) Waived retirees ^e	6,976	5,055	222	24		65	12,342
	d) Survivors	6,624	3,401	107	78		258	10,468
	e) Dependents	28,119	14,451	421	191		655	43,837
	f) Deferred vesteds	3,118	11,063	160	26		7	14,374
	ii) Covered Payroll	\$ 4,600,084,450	\$ 3,503,470,103	\$ 202,139,538	\$ 9,968,740	\$	195,943,999	\$ 8,511,606,830

e Excludes Active TRS members, Active SURS members, and Active SERS members who are dependents of SEGIP active members. Includes members who are active in TRS and have earned a deferred vested benefit with SERS, SURS, GARS, and JRS.

^b Valuation assumes a percentage of waived retirees and deferred vested members will elect retiree healthcare coverage in the future.

^c Deferred vested under Teachers Retirement System with between 5 and 7 years of service. They are currently ineligible for TRIP healthcare benefits, but may be eligible for either TRIP or SEGIP benefits depending on reciprocal service or future TRS service. Approximately 50% of the liability for these members is allocated to TRIP.

^d Stipend of \$150 or \$500 per month under "Opt-Out" program, available to SEGIP retirees.

^e Excludes waived retirees over age 75. No liability is assumed for these members.

^f Allocation of employer benefit payments for plan year end June 30, 2022, based on June 30, 2021, actuarial valuation.



Discount Rate

1.92%

Summary of Actuarial Valuation Results as of June 30, 2021

·						l Pre-Medicare Post-Medicare	4.25% 4.25%
A)	Actuarial Accrued Liability (AAL) at June 30, 2021	SERS	SURS	TRS	GARS	JRS	Total
	i) Actives ^a	\$ 5,204,610,650	\$ 1,887,473,913	\$ 230,714,979	\$ 6,086,187	\$ 37,516,793	\$ 7,366,402,522
	ii) Retirees and their covered dependents ^b	4,963,231,256	2,946,951,246	88,644,541	25,050,342	69,689,178	\$ 8,093,566,563
	iii) Deferred vesteds ^b	383,303,215	799,610,970	12,410,830	8,537,865	1,394,816	\$ 1,205,257,696
	iv) Deferred vesteds under TRS c	-	-	21,709,031	-	-	\$ 21,709,031
	v) Incurred But Not Paid (IBNP) liability	 193,894,791	108,126,632	3,321,171	941,700	2,819,979	309,104,274
	vi) Total	\$ 10,745,039,913	\$ 5,742,162,761	\$ 356,800,552	\$ 40,616,094	\$ 111,420,766	\$ 16,996,040,086
B)	Market Value of Assets	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
C)	Unfunded Actuarial Accrued Liability (UAAL)	\$ 10,745,039,913	\$ 5,742,162,761	\$ 356,800,552	\$ 40,616,094	\$ 111,420,766	\$ 16,996,040,086
D)	Funded Ratio: [B / A]	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
E)	UAAL as a percentage of covered payroll	233.6%	163.9%	176.5%	407.4%	56.9%	199.7%
F)	Net Normal Cost	\$ 419,093,933	\$ 210,233,827	\$ 17,338,616	\$ 881,313	\$ 4,628,985	\$ 652,176,674
G)	Estimated FYE 2022 Benefit Payments	\$ 565,215,965	\$ 315,196,187	\$ 9,681,430	\$ 2,745,118	\$ 8,220,423	\$ 901,059,123
H)	Contributions for IBNP Liability	\$ 112,841,883	\$ 62,926,976	\$ 1,932,838	\$ 548,046	\$ 1,641,157	\$ 179,890,899
I)	Interest Cost	\$ 399,559,697	\$ 212,730,258	\$ 13,593,393	\$ 1,471,046	\$ 4,101,938	\$ 631,456,331
J)	Change in IBNP Liability	\$ (74,342,064)	\$ (41,457,313)	\$ (1,273,385)	\$ (361,062)	\$ (1,081,221)	\$ (118,515,044)
K)	Projected Actuarial Accrued Liability at June 30, 2022	\$ 10,811,293,630	\$ 5,745,546,371	\$ 374,844,909	\$ 39,314,227	\$ 109,208,889	\$ 17,080,208,026
L)	Incurred FYE 2022 Benefit Payments ^f	\$ 607,540,888	\$ 338,798,942	\$ 10,406,402	\$ 2,950,680	\$ 8,835,991	\$ 968,532,903
M)	Participant Information i) Number of Covered Participants						
	a) Active employees ^a	60,257	46,325	2,455	120	935	110,092
	b) Current retirees with coverage or stipend d	52,965	30,867	1,022	282	864	86,000
	c) Waived retirees ^e	6,976	5,055	222	24	65	12,342
	d) Survivors	6,624	3,401	107	78	258	10,468
	e) Dependents	28,119	14,451	421	191	655	43,837
	f) Deferred vesteds	3,118	11,063	160	26	7	14,374
	ii) Covered Payroll	\$ 4,600,084,450	\$ 3,503,470,103	\$ 202,139,538	\$ 9,968,740	\$ 195,943,999	\$ 8,511,606,830

a Excludes Active TRS members, Active SURS members, and Active SERS members who are dependents of SEGIP active members. Includes members who are active in TRS and have earned a deferred vested benefit with SERS, SURS, GARS, and JRS.

^b Valuation assumes a percentage of waived retirees and deferred vested members will elect retiree healthcare coverage in the future.

^C Deferred vested under Teachers Retirement System with between 5 and 7 years of service. They are currently ineligible for TRIP healthcare benefits, but may be eligible for either TRIP or SEGIP benefits depending on reciprocal service or future TRS service. Approximately 50% of the liability for these members is allocated to TRIP.

 $^{\rm d}\,$ Stipend of \$150 or \$500 per month under "Opt-Out" program, available to SEGIP retirees.

^e Excludes waived retirees over age 75. No liability is assumed for these members.

^f Allocation of employer benefit payments for plan year end June 30, 2021, based on June 30, 2020, actuarial valuation.



Discount Rate

3.69%

SECTION C

GASB STATEMENT NO. 75 INFORMATION

Auditor's Note: This information is intended to assist in preparation of the financial statements of the State Employees Group Insurance Program of Illinois. Financial statements are the responsibility of management, subject to the auditor's review. Please let us know if the auditor recommends any changes.

Discussion

Accounting Standard

For post-employment (OPEB) benefit plans that are administered through trusts or equivalent arrangements, Governmental Accounting Standards Board (GASB) Statement No. 74, "Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans," replaces the requirements of GASB Statement No. 43, "Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans." GASB Statement No. 74 establishes standards of financial reporting for separately issued financial reports of state and local government OPEB plans.

GASB Statement No. 75 replaces the requirements of GASB Statement No. 45, Accounting and Financial Reporting by Employers for Postemployments Benefits Other Than Pensions, as amended, and GASB Statement No. 57, OPEB Measurements by Agent Employers and Agent Multiple-Employer Plans, for OPEB.

GASB Statements No. 74 and No 75 are effective for fiscal years beginning after June 15, 2016, and June 15, 2017, respectively.

The following discussion provides a summary of the information that is required to be disclosed under these accounting standards. A number of these disclosure items are provided in this report. However, certain non-actuarial information, such as notes regarding accounting policies and investments, is not included in this report. As a result, the plan sponsor will be responsible for preparing and disclosing the non-actuarial information needed to comply with these accounting standards.

Plan Financial Statements

GASB Statement No. 74 requires defined benefit OPEB plans which are administered as trusts or equivalent arrangements to present two financial statements: a statement of fiduciary net position and a statement of changes in fiduciary net position. The statement of fiduciary net position presents the assets and liabilities of the OPEB plan at the end of the OPEB plan's reporting period. The statement of changes in fiduciary net position presents the additions, such as contributions and investment income, and deductions, such as benefit payments and expense, and net increase or decrease in the fiduciary net position.

GASB Statement No. 75 requires state and local government employers to recognize the Net OPEB Liability and the OPEB expense on their financial statements, along with the related deferred outflows and inflows of resources. The Net OPEB Liability is the difference between the Total OPEB Liability and the plan's fiduciary net position. In traditional actuarial terms, this is analogous to the accrued liability less the market value of assets.

The OPEB expense recognized each fiscal year is equal to the change in the Net OPEB Liability from the beginning of the year to the end of the year, adjusted for deferred recognition of the liability and investment experience.



For GASB Statement No. 75 reporting purposes, the plan sponsor's fiscal year end June 30, 2023, financial reporting will be based on the results of the June 30, 2021, actuarial valuation projected to a measurement date of June 30, 2022.

GASB Statement No. 75 requires that employer contributions made to the OPEB plan subsequent to the measurement date and before the end of the employer's reporting period be reported as a deferred outflow of resources.

The information contained in this report does not incorporate any employer contributions made subsequent to the measurement date of June 30, 2022.

Notes to Financial Statements

GASB Statement No. 75 requires the notes of the employer's financial statements to disclose the total OPEB expense, the OPEB plan's liabilities and assets, and deferred outflows of resources and inflows of resources related to OPEB.

GASB Statement No. 75 requires the notes of the financial statements for the Plan and Plan Sponsor to include certain additional information. The list of disclosure items should include:

- The name of the OPEB plan, the administrator of the OPEB plan, and the identification of whether the OPEB plan is a single-employer, agent, or cost-sharing OPEB plan;
- A description of the benefits provided by the plan;
- A brief description of changes in benefit terms or assumptions that affected the measurement of the Total OPEB Liability since the prior measurement date;
- The number of plan members by category and if the plan is closed;
- A description of the plan's funding policy, which includes member and employer contribution requirements;
- The OPEB plan's investment policies;
- The OPEB plan's fiduciary net position and the Net OPEB Liability (or Total OPEB Liability if no trust exists to pay benefits);
- The Net OPEB Liability using a + / one percentage point change in the discount rate;
- The Net OPEB Liability using a + / one percentage point change in the healthcare trend rate;
- Significant assumptions and methods used to calculate the Total OPEB Liability;
- Inputs to the discount rates; and
- Certain information about mortality assumptions and the dates of experience studies.

Frequency and Timing of the Actuarial Valuation

An actuarial valuation to determine the Total OPEB Liability is required to be performed at least every two years. For the employer's financial reporting purposes, the Net OPEB Liability and OPEB expense should be measured as of the employer's "measurement date," which may not be earlier than the employer's prior fiscal year end date. If the actuarial valuation used to determine the Total OPEB Liability is not calculated as of the measurement date, the Total OPEB Liability is required to be rolled forward from the actuarial valuation date to the measurement date.



Single Discount Rate

Projected benefit payments are required to be discounted to their actuarial present values using a Single Discount Rate that reflects (1) a long-term expected rate of return on OPEB plan investments (to the extent that the plan's fiduciary net position is projected to be sufficient to pay benefits), and (2) a tax-exempt municipal bond rate based on an index of 20-year general obligation bonds with an average AA credit rating as of the measurement date (to the extent that the contributions for use with the long-term expected rate of return are not met).

Since SEGIP is financed on a pay-as-you-go basis, the sponsor has selected a discount rate consistent with the 20-year general obligation bond index described above. The discount rates are 1.92 percent as of June 30, 2021, and 3.69 percent as of June 30, 2022.

Actuarial Assumptions

The actuarial assumptions used to value the liabilities are outlined in detail in Section E. The actuarial assumptions include details on the healthcare trend assumption and the aging factors, as well as the actuarial cost method used to develop the OPEB expense.

Future Uncertainty or Risk

Future results may differ from those anticipated in this actuarial valuation. Reasons include, but are not limited to:

- Claims experience differing from expected;
- Medical trend experience differing from expected;
- Changes in the healthcare plan designs offered to active and retired members;
- Changes in healthcare related costs due to recent experience; and
- Participant behavior differing from expected; e.g.,
 - Elections at retirement;
 - o One-person versus two-person coverage elections; and
 - \circ $\;$ Timing of retirement or termination.

Benefits Valued

The benefit provisions that were valued are described in Section F. The actuarial valuation is required to be performed on the current benefit terms and existing legal agreements. Consideration is to be given to the written plan document as well as other communications between the employer and plan members and an established pattern of practice for cost sharing. The summary of major plan provisions is designed to outline principal plan benefits.



GASB Statement No. 75 Information

This section contains the following GASB Statement No. 75 information:

- GASB Statement No. 75 Summary;
- GASB Statement No. 75 Changes in Total OPEB Liability for plan year end June 30, 2022, applicable to the sponsor's fiscal year end June 30, 2023;
- GASB Statement No. 75 Expense measured as of plan year end June 30, 2022, and applicable to the sponsor's fiscal year end June 30, 2023;
- GASB Statement No. 75 Development of Inflows and Outflows as of June 30, 2022;
- Notes to Schedule of Contributions; and
- GASB Statement No. 75 Sensitivity of Total OPEB Liability as of plan year end June 30, 2022.



Summary of GASB Statement No. 75 Results

		2021			
Actuarial Valuation Date		June 30, 2021			
Measurement Date of the Total OPEB Liability	June 30, 2022				
Employer's Fiscal Year End for GASB Statement No. 75	June 30, 2023				
Membership					
Number of					
- Retirees and Beneficiaries		96,468			
- Inactive, Nonretired Members		26,716			
- Active Members		110,092			
- Total		233,276			
Covered Payroll	\$	8,511,606,830			
Total OPEB Liability					
Total OPEB Liability	\$	17,080,208,026			
Plan Fiduciary Net Position		-			
Total OPEB Liability	\$	17,080,208,026			
Plan Fiduciary Net Position as a Percentage					
of Total OPEB Liability		0.00%			
Total OPEB Liability as a Percentage					
of Covered Payroll		200.67%			
Development of the Single Discount Rate					
Single Discount Rate Beginning of Year		1.92%			
Single Discount Rate End of Year		3.69%			
Long-Term Expected Rate of Investment Return, Beginning of Year		0.00%			
Long-Term Expected Rate of Investment Return, End of Year		0.00%			
Long-Term Municipal Bond Rate Beginning of Year ^a		1.92%			
Long-Term Municipal Bond Rate End of Year ^a		3.69%			
Year Assets are Projected to be depleted		2021			
Total OPEB Expense for Fiscal Year End June 30, 2022, Applicable to Sponsor's Fiscal Year End June 30, 2023	\$	(4,674,977,406)			

Deferred Outflows and Deferred Inflows of Resources by Source to be Recognized in Future OPEB Expenses as of June 30, 2022

	-	erred Outflows of Resources	Deferred (Inflows) of Resources			
Difference between Expected and Actual Experience	\$	174,727,147	\$	(4,670,584,358)		
Changes in Assumptions		421,606,184		(16,730,336,203)		
Net Difference between Expected and Actual Investment Experience		-		-		
Total	\$	596,333,331	\$	(21,400,920,561)		

^a Source:

Fixed-income municipal bonds with 20 years to maturity that include only federally tax-exempt municipal bonds as reported in Fidelity Index's "20-Year Municipal GO AA Index" as of June 30, 2021, and June 30, 2022. In describing this index, Fidelity notes that the municipal curves are constructed using option-adjusted analytics of a diverse population of over 10,000 tax-exempt securities.



Schedule of Changes in Total OPEB Liability under GASB Statement No. 75 Measured as of June 30, 2022, Applicable to Plan Sponsor's Fiscal Year End June 30, 2023

Fiscal Year Ending June 30,	 2022	2021	2020	2019	2018	2017
Total OPEB Liability						
Service Cost	\$ 981,107,380 \$	\$ 1,320,595,821 \$	1,454,468,459 \$	1,359,786,577 \$	1,372,138,823 \$	1,696,977,300
Interest on the Total OPEB Liability	405,582,586	781,101,819	1,174,779,486	1,441,517,280	1,435,703,685	1,242,236,513
Changes of Benefit Terms	-	-	-	-	-	-
Difference between Expected and Actual Experience	(5,726,367,048)	97,179,502	239,943,788	69,152,774	(1,096,156,817)	16,224,331
Changes of Assumptions	(12,343,588,397)	(8,722,033,367)	(3,233,540,523)	1,893,969,860	(898,313,223)	(4,805,714,863)
Net Benefit Payments ^c	 (1,148,423,802)	(931,572,770)	(1,158,193,925)	(968,505,967)	(2,043,982,829)	(325,218,883)
Net Change in Total OPEB Liability	\$ (17,831,689,281) \$	\$ (7,454,728,995) \$	(1,522,542,715) \$	3,795,920,523 \$	(1,230,610,361) \$	(2,175,495,602)
Total OPEB Liability at beginning of year ^a	\$ 34,911,897,307 \$	\$ 42,366,626,302 \$	43,889,169,017 \$	40,093,248,494 \$	41,323,858,855 \$	43,499,354,457
Total OPEB Liability at end of year ^b	\$ 17,080,208,026 \$	\$ 34,911,897,307 \$	42,366,626,302 \$	43,889,169,017 \$	40,093,248,494 \$	41,323,858,855
Covered-Employee Payroll	\$ 8,511,606,830 \$	\$ 8,629,835,687 \$	7,842,130,597 \$	7,666,176,952 \$	7,516,762,973 \$	7,663,997,200
Total OPEB Liability as a Percentage of Covered Payroll	200.67%	404.55%	540.24%	572.50%	533.38%	539.19%

^{*a*} Includes \$309,104,274 in incurred but not paid healthcare liabilities as of June 30, 2021.

^b Includes \$18,815,357 in incurred but not paid healthcare liabilities as of June 30, 2022.

^c Benefit payments for plan year end June 30, 2022, include payments to reduce the IBNP from \$309,104,274 as of June 30, 2021, to \$18,815,357 as of June 30, 2022.



Statement of OPEB Expense under GASB Statement No. 75 Measured as of June 30, 2022 Applicable to Plan Sponsor's Fiscal Year End June 30, 2023

A. Expense

В.

change in investment experience Outhows/(innows) Recognized in Current Assets	\$	
Change in Investment Experience Outflows //Inflows/ Recognized in Current Assets		-
Change in Assumption Updates Outflows/(Inflows) Recognized in Current Liabilities		(7,490,150,510)
Change in Liability Experience Outflows/(Inflows) Recognized in Current Liabilities		(4,507,972,436)
Employer Contributions		(1,158,588,929)
OPEB Expense		(4,674,977,406)
Total OPEB Liability at June 30, 2021	\$	34,911,897,307
conciliation of Total OPEB Liability		
Total OPEB Expense	\$	(4,674,977,406)
Recognition of Outflow/(Inflow) due to Investment Experience		-
Recognition of Outflow/(Inflow) due to Assumption Changes		(4,853,437,887)
Recognition of Outflow/(Inflow) due to Liability Experience		(1,218,394,612)
OPEB Plan Operating Expenses		10,165,127
Active Member Contributions		-
Current-Period Benefit Changes		-
Interest on the Total OPEB Liability		405,582,586
Service Cost	\$	981,107,380
	Active Member Contributions OPEB Plan Operating Expenses Recognition of Outflow/(Inflow) due to Liability Experience Recognition of Outflow/(Inflow) due to Assumption Changes Recognition of Outflow/(Inflow) due to Investment Experience Total OPEB Expense Conciliation of Total OPEB Liability Total OPEB Liability at June 30, 2021 OPEB Expense Employer Contributions Change in Liability Experience Outflows/(Inflows) Recognized in Current Liabilities	Interest on the Total OPEB Liability Current-Period Benefit Changes Active Member Contributions OPEB Plan Operating Expenses Recognition of Outflow/(Inflow) due to Liability Experience Recognition of Outflow/(Inflow) due to Assumption Changes Recognition of Outflow/(Inflow) due to Investment Experience Total OPEB Expense \$ conciliation of Total OPEB Liability Total OPEB Liability at June 30, 2021 \$ OPEB Expense Employer Contributions Change in Liability Experience Outflows/(Inflows) Recognized in Current Liabilities Change in Assumption Updates Outflows/(Inflows) Recognized in Current Liabilities



Recognition of Deferred Outflows and Inflows of Resources

Differences between expected and actual experience and changes in assumptions are recognized in OPEB expense using a systematic and rational method over a closed period equal to the average of the expected remaining service lives of all employees who are provided with OPEB through the OPEB plan (active employees and inactive employees) determined as of the beginning of the measurement period.

At the beginning of the current measurement period, the expected remaining service lives of all active members in the plan was approximately 1,230,764.18 years. Additionally, the total plan membership (active, inactive, and retired members) was 233,276. As a result, the average of the expected remaining service lives for purposes of recognizing the applicable deferred outflows and inflows of resources established in the current measurement period is 5.276000 years.

Additionally, differences between projected and actual earnings on OPEB plan investments should be recognized in OPEB expense using a systematic and rational method over a closed five-year period. For this purpose, the deferred outflows and inflows of resources are recognized in the OPEB expense as a level dollar amount over the closed period identified above.



Statement of Outflows and Inflows Arising from Current and Prior Reporting Periods Measured as of June 30, 2022, Applicable to Plan Sponsor's Fiscal Year End June 30, 2023

A. Outflows and (Inflows) of Resources Recognized in Current and Future OPEB Expenses as of Plan Year End June 30, 2022

Experience (Gain)/Loss		Original Balance	Date Established	Original Recognition Period/ Amortization Factor	Amount Recognized in Past OPEB Expenses		ount Recognized in rent OPEB Expense	to	eferred (Inflows) be Recognized in ure OPEB Expenses	Deferred Outflows to be Recognized in Future OPEB Expenses		
1 Liability (Gain)/Loss	Ś	(5,726,367,048)	June 30, 2022	5.276000		-	\$ (1,085,361,457)	\$	(4,641,005,591)	\$	-	
	\$	97,179,502	June 30, 2021	5.187947		18,731,784	18,731,784		-		59,715,934	
	\$	239,943,788	June 30, 2020	5.129697		93,550,862	46,775,431		-		99,617,495	
	\$	69,152,774	June 30, 2019	5.145386		40,319,292	13,439,764		-		15,393,718	
	\$	(1,096,156,817)	June 30, 2018	5.138662		(853,262,440)	(213,315,610)		(29,578,767)		-	
	\$	16,224,331	June 30, 2017	5.448481		14,888,855	1,335,476		-		-	
					\$	(685,771,647)	\$ (1,218,394,612)	\$	(4,670,584,358)	\$	174,727,147	
2 Assumption Changes	\$	(12,343,588,397)	June 30, 2022	5.276000		-	\$ (2,339,573,237)	\$	(10,004,015,160)	\$	-	
	\$	(8,722,033,367)	June 30, 2021	5.187947		(1,681,210,962)	(1,681,210,962)		(5,359,611,443)		-	
	\$	(3,233,540,523)	June 30, 2020	5.129697		(1,260,714,044)	(630,357,022)		(1,342,469,457)		-	
	\$	1,893,969,860	June 30, 2019	5.145386		1,104,272,757	368,090,919		-		421,606,184	
	\$	(898,313,223)	June 30, 2018	5.138662		(699,258,464)	(174,814,616)		(24,240,143)		-	
	\$	(4,805,714,863)	June 30, 2017	5.448481		(4,410,141,894)	(395,572,969)		-		-	
					\$	(6,947,052,607)	\$ (4,853,437,887)	\$	(16,730,336,203)	\$	421,606,184	
3 Investment (Gain)/Loss	\$	-	June 30, 2022	5.000000	\$	-	\$ -	\$	-	\$	-	
	\$	-	June 30, 2021	5.000000		-	-		-		-	
	\$	-	June 30, 2020	5.000000		-	-		-		-	
	\$	-	June 30, 2019	5.000000		-	-		-		-	
	\$	-	June 30, 2018	5.000000		-	-		-		-	
	\$	-	June 30, 2017	5.000000		-	 -		-		-	
					\$	-	\$ -	\$	-	\$	-	
4 Total					\$	(7,632,824,254)	\$ (6,071,832,499)	\$	(21,400,920,561)	\$	596,333,331	

B. Deferred Outflows and Deferred (Inflows) of Resources by Year to be Recognized in Future OPEB Expenses

Year Ending June 30,	ability Outflows tflows/(Inflows)	 Assumption Changes Outflows /(Inflows)		nvestment lows/(Inflows)	Year Ending June 30,	De	ferred Outflows	D	eferred (Inflows)	Net Outflows/(Inflows)		
2023	\$ (1,035,993,247)	\$ (4,307,290,446)	\$	-	2023	\$	447,037,898	\$	(5,790,321,591)	\$	(5,343,283,693)	
2024	\$ (1,017,900,288)	\$ (4,597,625,955)	\$	-	2024	\$	120,976,435	\$	(5,736,502,678)	\$	(5,615,526,243)	
2025	\$ (1,060,563,040)	\$ (4,102,539,614)	\$	-	2025	\$	24,798,417	\$	(5,187,901,071)	\$	(5,163,102,654)	
2026	\$ (1,081,840,874)	\$ (2,655,551,794)	\$	-	2026	\$	3,520,583	\$	(3,740,913,251)	\$	(3,737,392,668)	
2027	\$ (299,559,762)	\$ (645,722,213)	\$	-	2027	\$	-	\$	(945,281,976)	\$	(945,281,976)	
2028	\$ -	\$ -	\$	-	2028	\$	-	\$	-	\$	-	
2029	\$ -	\$ -	\$	-	2029	\$	-	\$	-	\$	-	
Total	\$ (4,495,857,212)	\$ (16,308,730,022)	\$	-	Total	\$	596,333,333	\$	(21,400,920,566)	\$	(20,804,587,234)	
Change in Outflows/(Inflows)	\$ (4,507,972,436)	\$ (7,490,150,510)	\$	-								

Numbers may not add due to rounding.



Notes to Schedule of Contributions

Valuation Date Measurement Date Sponsor's Fiscal Year End	June 30, 2021 June 30, 2022 June 30, 2023								
Methods and Assumptions Used to Determine Actuarial Liability and Contributions:									
Actuarial Cost Method	Entry Age Normal, used to measure the Total OPEB Liability								
Contribution Policy	Benefits are financed on a pay-as-you-go basis. Retired members contribute a percentage of premium rates based on service at retirement. The sponsor contributes claims and expenses in excess of retired member contributions. The goal of the policy is to finance current year costs plus a margin for incurred but not paid plan costs.								
Retirees' share of benefit- related costs	Healthcare premium rates for members depend on the date of retirement and the years of service earned at retirement. Members who retired before January 1, 1998, are eligible for single coverage at no cost to the member. Members who retire after January 1, 1998, are eligible for single coverage provided they pay a portion of the premium equal to 5 percent for each of service under 20 years. Eligible dependents receive coverage provided they pay 100 percent of the required dependent premium. Premiums for plan year 2022 and 2023 are based on actual premiums. Premiums after 2023 were projected based on the same healthcare cost trend rates applied to per capita claim costs.								
Asset Valuation Method	Not applicable								
Investment Rate of Return Inflation	Not applicable 2.25%								
Healthcare Cost Trend Rates	Trend rates for plan year 2023 are based on actual premium increases. For non- medicare costs, trend rates start at 8.00% for plan year 2024 and decrease gradually to an ultimate rate of 4.25% in 2039. For MAPD costs, trend rates are 0% in 2024 to 2028, 19.42% in 2029 to 2033 and 5.77% in 2034, declining gradually to an ultimate rate of 4.25% in 2039.								
Aging Factors	Based on the 2013 SOA Study "Health Care Costs - From Birth to Death"								
Expenses	Health administrative expenses are included in the development of the per capita claims costs. Operating expenses are included as a component of the Annual OPEB Expense.								
Other:	Incurred but not paid healthcare claims liability was based on information provided by the plan sponsor. Total OPEB liability includes incurred but not paid liability of \$ 309,104,274 as of June 30, 2021, and \$ 18,815,357 as of June 30, 2022.								



GASB Statement No. 75 Information

	SERS	SURS	TRS	JRS	GARS
Salary Increases	Depends on age and ranges from 7.17% at age 25 graded down to 2.75% at age 70. Salary increase includes a 2.75% wage inflation assumption.	50 years of age, and ranges from 12.00% at less than 1 year of	Depends on service and ranges from 8.50% at 1 year of service to 3.50% at 20 or more years of service.	2.50% per annum	2.50% per annum
Retirement Age	that are specific to the type of eligibility condition. Last updated for the June 30, 2019, actuarial	eligibility condition. Last updated		that are specific to the type of eligibility condition. Last updated	Experience-based table of rates that are specific to the type of eligibility condition. Last updated for the June 30, 2019, actuarial valuation.
Mortality	Retirement and Beneficiary Annuitants: Pub-2010 General Healthy Retiree Table and Pub- 2010 Public Safety Healthy Retiree Table. Pre-Retirement: Pub-2010 General Employee Table and Pub-2010 Public Safety Employee Table. Tables are adjusted for SERS experience. All tables reflect future mortality improvements using Projection Scale MP-2018.	Mortality Table. Tables are adjusted for SURS experience. All	Incolected generationally with	Annuitants: Pub-2010 Above- Median Income General Healthy Retiree Table. Pre-Retirement: Pub-2010 Above-Median Income General Employee Table. Tables are adjusted for JRS experience. All tables reflect future mortality improvements using Projection	Retirement and Beneficiary Annuitants: Pub-2010 Above- Median Income General Healthy Retiree Table. Pre-Retirement: Pub-2010 Above-Median Income General Employee Table. Tables are adjusted for GARS experience. All tables reflect future mortality improvements using Projection Scale MP-2018.



Single Discount Rate

Retirees contribute a percentage of the premium rate based on service at retirement. The State contributes additional amounts to cover claims and expense in excess of retiree contributions. Because plan benefits are financed on a pay-as-you-go basis, the single discount rate is based on a tax-exempt municipal bond rate index of 20-year general obligation bonds with an average AA credit rating as of the measurement date. A single discount rate of 1.92 percent at June 30, 2021, and 3.69 percent at June 30, 2022, was used to measure the Total OPEB liability.

Sensitivity of Total OPEB Liability

The following table shows the plan's Total OPEB liability as of June 30, 2022, using the current single discount rate of 3.69 percent, and sensitivity single discount rates that are either one percentage point higher or lower:

Current Single Discount									
	1% Decrease	Rate Assumption			1% Increase				
2.69%			3.69%		4.69%				
\$	18,844,505,914	\$	17,080,208,026	\$	15,170,798,162				

The following table shows the plan's Total OPEB Liability as of June 30, 2022, using current trend rates and sensitivity trend rates that are either one percentage point higher or lower. The current claims trend rates are 8.00% in plan year end 2024 decreasing to an ultimate trend rate of 4.25% in plan year end 2039.

Healthcare Cost								
1% Decrease ^a			Trend Rates Assumption			1% Increase ^b		
	\$	14,788,045,159	\$	17,080,208,026	\$	19,403,381,090		

^a Current healthcare trend rates -

Pre-Medicare per capita costs: 6.08% in 2023, 8.00% in 2024, decreasing by 0.25% per year to an ultimate rate of 4.25% in 2039.

Post-Medicare per capita costs: 2.78% in 2023, 0.00% from 2024 to 2028, 19.42% from 2029 to 2033, 5.77% in 2034 decreasing ratably to an ultimate trend rate of 4.25% in 2039.

^b One percentage point decrease in current healthcare trend rates -

Pre-Medicare per capita costs: 5.08% in 2023, 7.00% in 2024, decreasing by 0.25% per year to an ultimate rate of 3.25% in 2039.

Post-Medicare per capita costs: 1.78% in 2023, 0.00% from 2024 to 2028, 18.42% from 2029 to 2033, 4.77% in 2034 decreasing ratably to an ultimate trend rate of 3.25% in 2039.

^c One percentage point increase in current healthcare trend rates -

Pre-Medicare per capita costs: 7.08% in 2023, 9.00% in 2024, decreasing by 0.25% per year to an ultimate rate of 5.25% in 2039.

Post-Medicare per capita costs: 3.78% in 2023, 1.00% from 2024 to 2028, 20.42% from 2029 to 2033, 6.77% in 2034 decreasing ratably to an ultimate trend rate of 5.25% in 2039.



SECTION D

ADDITIONAL VALUATION EXHIBITS

40-Year Projection of Expected Employer Claims ^a

Plan YearExpectedEndingEmployerJune 30,Claims		Year Beginning July 1	Expected Employer Claims		
		<u>.</u>			
2022 ^b	\$ 901,059,123	2042	\$ 1,309,145,340		
2023	853,867,232	2043	1,304,630,963		
2024	813,737,483	2044	1,298,417,028		
2025	850,906,957	2045	1,282,485,615		
2026	884,889,468	2046	1,261,769,353		
2027	963,821,543	2047	1,234,452,012		
2028	994,689,023	2048	1,199,271,971		
2029	1,035,224,266	2049	1,161,255,082		
2030	1,075,276,048	2050	1,120,242,292		
2031	1,123,354,340	2051	1,075,458,248		
2032	1,174,913,661	2052	1,033,086,201		
2033	1,209,568,172	2053	990,776,132		
2034	1,234,797,144	2054	947,514,270		
2035	1,253,405,335	2055	903,272,435		
2036	1,261,651,065	2056	854,156,346		
2037	1,269,192,161	2057	803,449,571		
2038	1,277,553,470	2058	755,056,189		
2039	1,286,513,772	2059	708,080,121		
2040	1,298,620,540	2060	660,684,997		
2041	1,307,511,562	2061	614,557,570		

^{*a*} Expected claims net of retiree contributions for current participants.

^b During plan year end June 30, 2022, the sponsor incurred net employer claims of \$968,532,903 and operating expenses of \$10,165,127, and made a contribution of \$1,158,588,929. Benefit payments for plan year end June 30, 2022, include payments to reduce the IBNP from \$309,104,274 as of June 30, 2021, to \$18,815,357 as of June 30, 2022.



Summary of Demographic Information

• •	• · · • • · · · · · · · · · · · · · · ·	<u>SERS</u>	<u>SURS</u>	<u>TRS</u>	GARS	<u>JRS</u>	Combined
A)	Active Participants ^a						
	i) Counts	60,257	46,325	2,455	120	935	110,092
	ii) Average Age	45.3	45.7	46.5	50.4	58.2	45.6
	iii) Average Service	11.2	10.4	13.5	8.8	10.6	10.9
B)	Deferred vested participants b,c						
	i) Counts	3,118	11,063	160	26	7	14,374
	ii) Average Age	52.6	50.6	51.4	54.4	55.7	51.1
C)	Retirees with SEGIP Healthcare Coverage						
	i) Counts	52,488	30,507	1,021	280	863	85,159
	ii) Average Age	70.3	72.4	73.2	74.1	72.9	71.1
D)	Survivors with SEGIP Healthcare Coverage Over Age 26						
	i) Counts	6,559	3,396	107	78	255	10,395
	ii) Average Age	77.3	80.2	80.5	81.7	79.3	78.4
E)	Dependents with SEGIP Healthcare Coverage Over Age 26						
	i) Counts	22,071	12,327	375	158	570	35,501
	ii) Average Age	66.1	69.0	70.6	69.9	69.1	67.2
F)	Retirees and Survivors Waiving Medical Coverage (Excluding T	hose Over Age	e 75) ^{d, e}				
	i) Counts	6,976	5,055	222	24	65	12,342
	ii) Average Age	65.5	66.4	65.5	64.0	67.4	65.8
G)	Retirees Receiving a Monthly Stipend ^f						
	i) Counts	477	360	1	2	1	841
	ii) Average Age	62.6	63.5	55.0	62.0	55	62.9
H)	Survivors with SEGIP Healthcare Coverage Age 26 and Under						
	i) Counts	65	5	-	-	3	73
	ii) Average Age	17.4	20.0	N/A	N/A	19.0	17.7
I)	Dependents with SEGIP Healthcare Coverage Age 26 and Und	er					
	i) Counts	6,048	2,124	46	33	85	8,336
	ii) Average Age	20.4	20.8	20.8	20.2	20.6	20.5
I)	Total Participants	158,059	111,162	4,387	721	2,784	277,113

^a Excludes Active TRS members, Active SURS members, and Active SERS members who are dependents of SEGIP active members. Includes members who are active in TRS and have earned a deferred vested benefit with SERS, SURS, GARS, and JRS.

^b Valuation assumes a percentage of waived retirees and deferred vested members will elect retiree healthcare coverage in the future.

^c Under TRS, includes deferred vested members with between 5 and 7 years of service. They are currently ineligible for TRIP healthcare benefits, but may be eligible for either TRIP or SEGIP benefits depending on reciprocal service or future TRS service. 50% of the liability for these members is allocated to TRIP and 50% is allocated to SEGIP. The counts under TRS also include deferred vested benefits with more than 7 years of service.

^d Includes 1,725 retirees and 151 survivors with only dental coverage.

^e Excludes waived retirees over age 75. No liability is assumed for these members.

^f Stipend under "Opt-Out" program, available to retirees.



SECTION E

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

Development of Per Capita Claim Costs

The per capita claims used in the actuarial valuation are based on average per member costs by plan type for the periods from July 1, 2021, through June 30, 2022, and from July 1, 2020, through June 30, 2021, as provided by the Department of Central Management Services (CMS) and reviewed by CMS' healthcare actuary. The per capita claims for the MAPD plans used in the actuarial valuation were based on weighted average premium rates, as provided by CMS. The average costs were adjusted at each respective retirement age by the morbidity factors disclosed in the assumption section of the report.

Effective as of January 1, 2023, the Aetna MAPD plan will be the only MAPD plan provided to Medicare retirees. CMS has negotiated a zero premium plan with Aetna for calendar years 2023 through 2027. The zero premium plan may also be extended for another five years after 2027.

Based on discussions with CMS, we have assumed an MAPD premium rate of approximately \$42 per member per month starting in calendar year 2028. This rate includes administrative expenses of approximately \$6 per member per month.

After calendar year 2028, we have assumed the MAPD premium rate will increase by approximately 19.42 percent per year for next five years resulting in a rate of approximately \$102 per member per month in calendar year 2032. After calendar year 2032, MAPD premium rates are assumed to increase using the trend rate provided on page E-3.

Retired members are assumed to pay 25 percent of the premium and dependents are assumed to pay 75 percent of the premium.

Cost Method and Expense Calculations for Retiree Healthcare Benefits

The retiree healthcare actuarial valuation was based on the Entry Age Normal cost method. Under this method, the normal cost and actuarial accrued liability are directly proportional to the employee's salary. The normal cost rate equals the present value of future benefits at entry age divided by the present value of future salary at entry age. The normal cost at the member's attained age equals the normal cost rate at entry age multiplied by the salary at attained age. The actuarial accrued liability equals the present value of benefits at attained age less present value of future salaries at attained age multiplied by normal cost rate at entry age.

Under GASB Statement Nos. 74 and 75, the Entry Age Normal Method is the required cost method.

Census Data

The actuarial valuation was based on SERS, SURS, TRS, GARS, and JRS active, inactive, and retiree data as of June 30, 2021, for eligible SEGIP members, and SEGIP retiree data as of June 30, 2021.



Retirees' Share of Benefit-Related Costs

Healthcare premium rates for members depend on the date of retirement and the years of service earned at retirement. Members who retired before January 1, 1998, are eligible for single coverage at no cost to the member. Members who retire after January 1, 1998, are eligible for single coverage provided they pay a portion of the premium equal to 5 percent for each of service under 20 years. Eligible dependents receive coverage provided they pay 100 percent of the required dependent premium. Premiums for plan year 2022 and 2023 are based on actual premiums. Premiums after 2023 were projected based on the same healthcare cost trend rates applied to per capita claim costs.



Actuarial Assumptions

The actuarial assumptions used in our actuarial valuation are outlined on the following pages.

Valuation Date	June 30, 2021
Measurement Date	June 30, 2022
Discount Rate	1.92% at June 30, 2021 3.69% at June 30, 2022
Inflation ¹	2.25%
Wage Inflation ²	2.75% for SERS 3.00% for SURS 3.50% for TRS 2.50% for JRS and GARS

OPEB Assumptions

		Healthcare Trend		
	QCHP	MAPD	QCHP	MAPD
Fiscal Year End	Medical and Rx	Medical and Rx	<u>Retiree Premium</u>	Retiree Premium
	/			
2023	6.08%	2.78%	10.21%	-3.82%
2024	8.00%	0.00%	8.00%	0.00%
2025	7.75%	0.00%	7.75%	0.00%
2026	7.50%	0.00%	7.50%	0.00%
2027	7.25%	0.00%	7.25%	0.00%
2028	7.00%	0.00%	7.00%	0.00%
2029	6.75%	19.42%	6.75%	19.42%
2030	6.50%	19.42%	6.50%	19.42%
2031	6.25%	19.42%	6.25%	19.42%
2032	6.00%	19.42%	6.00%	19.42%
2033	5.75%	19.42%	5.75%	19.42%
2034	5.50%	5.77%	5.50%	5.77%
2035	5.25%	5.45%	5.25%	5.45%
2036	5.00%	5.13%	5.00%	5.13%
2037	4.75%	4.82%	4.75%	4.82%
2038	4.50%	4.50%	4.50%	4.50%
2039	4.25%	4.25%	4.25%	4.25%

¹ Underlying Inflation used to develop ultimate salary increase, trend rates, and investment return assumptions.

² Ultimate salary increase used to project payroll.



<u>Age</u>	<u>Morbidity</u>	Morbidity Factor					
	<u>Male</u>	<u>Female</u>					
50	5.81%	3.46%					
55	5.44%	2.84%					
60	5.02%	3.66%					
65	1.68%	2.46%					
70	1.72%	1.89%					
75	1.07%	1.20%					
80	0.62%	0.97%					
85	-0.37%	0.36%					
90	-0.28%	-0.14%					

PYE 2022 Annual Per Capita Claims Costs for Pre 65, Not Medicare Eligible Members

	QCHP		0/	AP	НМО		
	Medical	Medical and Rx		l and Rx	Medical and Rx		
<u>Age</u>	<u>Male</u>	<u>Female</u>	Male	<u>Female</u>	Male	<u>Female</u>	
20	\$ 4,056	\$ 5,308	\$ 4,304	\$ 5,632	\$ 3,548	\$ 4,643	
25	3,434	7,020	3,644	7,450	3,004	6,141	
30	4,205	9,895	4,462	10,500	3,678	8,655	
35	5,239	10,764	5,559	11,423	4,583	9,416	
40	6,542	10,631	6,942	11,281	5,723	9,299	
45	8,145	11,241	8,643	11,928	7,124	9,832	
50	10,605	13,065	11,254	13,863	9,276	11,427	
51	11,221	13,517	11,907	14,343	9,815	11,823	
52	11,863	13,960	12,588	14,814	10,376	12,211	
53	12,531	14,392	13,297	15,271	10,960	12,588	
54	13,228	14,815	14,036	15,721	11,570	12,958	
55	13,955	15,237	14,808	16,169	12,207	13,328	
56	14,714	15,670	15,613	16,628	12,870	13,706	
57	15,502	16,126	16,450	17,112	13,560	14,105	
58	16,317	16,618	17,314	17,634	14,272	14,536	
59	17,156	17,156	18,205	18,205	15,006	15,006	
60	18,024	17,747	19,126	18,832	15,765	15,523	
61	18,929	18,397	20,086	19,522	16,557	16,091	
62	19,878	19,105	21,093	20,273	17,387	16,711	
63	20,874	19,868	22,150	21,083	18,258	17,379	
64	21,918	20,684	23,258	21,949	19,171	18,092	

Annual Dental Cost: \$462 Annual Vision Cost: \$24



	QCHP		0/	OAP		HMO		MAPD	
	Medica	l and Rx	<u>Medica</u>	l and Rx	Medical	l and Rx	<u>Medica</u>	l and Rx	
<u>Age</u>	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>	Male	<u>Female</u>	Male	<u>Female</u>	
65	\$ 7,247	\$ 6 <i>,</i> 835	\$ 8,171	\$ 7,707	\$ 6 <i>,</i> 699	\$ 6,318	\$ 1,628	\$ 1,535	
66	7,368	7,003	8,308	7,896	6,811	6,473	1,655	1,573	
67	7,494	7,168	8,450	8,082	6,927	6,626	1,683	1,610	
68	7,623	7,330	8 <i>,</i> 595	8,265	7,047	6,775	1,712	1,647	
69	7,757	7,488	8,746	8,442	7,170	6,921	1,742	1,682	
70	7,894	7,639	8,901	8,613	7,297	7,061	1,773	1,716	
71	8,030	7,783	9,054	8,776	7,423	7,195	1,804	1,748	
72	8,159	7,920	9,199	8,930	7,542	7,321	1,833	1,779	
73	8,276	8,048	9,332	9,074	7,650	7,439	1,859	1,808	
74	8,382	8,165	9,451	9,207	7,748	7,548	1,883	1,834	
75	8,479	8,273	9,560	9,328	7,837	7,647	1,905	1,858	
76	8,570	8,373	9,662	9,441	7,921	7,739	1,925	1,881	
77	8,658	8,468	9,762	9,548	8,003	7,827	1,945	1,902	
78	8,746	8,561	9,861	9,653	8,084	7,913	1,965	1,923	
79	8,829	8,654	9,954	9,758	8,161	7,999	1,983	1,944	
80	8,901	8,745	10,036	9,860	8,228	8,084	1,999	1,964	
81	8,957	8,830	10,099	9,956	8,279	8,162	2,012	1,983	
82	8,990	8,906	10,136	10,041	8,310	8,232	2,019	2,000	
83	9,000	8,972	10,148	10,116	8,319	8,293	2,022	2,015	
84	8,990	9,027	10,137	10,178	8,310	8,344	2,019	2,028	
85	8,966	9,071	10,109	10,228	8,287	8,385	2,014	2,038	
86	8,933	9,104	10,072	10,265	8,257	8,415	2,007	2,045	
87	8,896	9,128	10,031	10,292	8,223	8,437	1,998	2,050	
90	8,800	9,162	9,922	10,331	8,134	8,469	1,977	2,058	
98 +	8,562	8,062	9,654	9,090	7,914	7,452	1,923	1,811	

PYE 2022 Annual Per Capita Claims Costs for Medicare Eligible Members

Annual Dental Cost: \$462 Annual Vision Cost: \$24



The 2022 Annual Fer Capita Claims Costs for Fost 05, Not Medicate Engine Members						
		ΉP		AP	HN	/10
	<u>Medica</u>	l and Rx	<u>Medica</u>	l and Rx	<u>Medical</u>	and Rx
<u>Age</u>	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>
65	\$ 22,650	\$ 21,363	\$ 24,035	\$ 22,669	\$ 19,812	\$ 18,686
66	23,030	21,889	24,438	23,227	20,144	19,146
67	23,423	22,404	24,855	23,774	20,488	19,597
68	23,827	22,910	25,284	24,311	20,841	20,039
69	24,245	23,402	25,727	24,833	21,206	20,470
70	24,674	23,876	26,182	25,336	21,582	20,884
71	25,099	24,327	26,634	25,814	21,954	21,279
72	25,501	24,754	27,060	26,267	22,306	21,652
73	25,868	25,153	27,449	26,691	22,626	22,001
74	26,199	25,521	27,800	27,082	22,916	22,323
75	26,500	25,859	28,120	27,439	23,180	22,618
76	26,784	26,170	28,422	27,769	23,428	22,890
77	27,061	26,466	28,716	28,084	23,670	23,150
78	27,335	26,758	29,006	28,394	23,909	23,405
79	27,594	27,049	29,281	28,702	24,136	23,659
80	27,820	27,334	29,521	29,005	24,334	23,908
81	27,994	27,599	29,705	29,286	24,486	24,140
82	28,098	27,835	29,816	29,536	24,577	24,347
83	28,130	28,041	29,850	29,755	24,605	24,527
84	28,099	28,215	29,817	29,940	24,578	24,679
85	28,023	28,353	29,736	30,086	24,511	24,800
86	27,919	28,454	29,626	30,194	24,420	24,889
87	27,805	28,529	29,505	30,273	24,321	24,954
90	27,503	28,637	29,185	30,387	24,057	25,048
98 +	26,761	25,197	28,397	26,737	23,408	22,039

PYE 2022 Annual Per Capita Claims Costs for Post 65, Not Medicare Eligible Members

Annual Dental Cost:\$462Annual Vision Cost:\$24



Participation

Current active members participating in SERS, SURS, or TRS are assumed to participate in SEGIP at retirement as follows:

		Participation Rates					
		(Cu	(Current Active SEGIP Participants)				
_	Service	Waived	1-Person	2-Person	Total	_	
	20 or more	0%	55%	45%	100%		
	15 to 20	5%	52%	43%	100%		
	10 to 15	8%	51%	41%	100%		
	Less than 10	35%	36%	29%	100%		

For deferred vested members, preceding rates are multiplied by 80 percent for females, and 75 percent for males.

Two percent of future eligible retirees are assumed to participate in the Opt-Out – Financial Incentive Program. The Opt-Out program provides a financial incentive – \$500 per month if service is greater than or equal to 20 years or \$150 per month if service is less than 20 years – to enroll in another healthcare program prior to becoming eligible for Medicare. Members in the Opt-Out program are assumed to elect SEGIP Medicare coverage after age 65.

Ten percent of members in the SURS RSP program are assumed to annuitize their account balance upon retirement and elect healthcare coverage under SEGIP.

	SEGIP Election Rates					
_	(Current Waived SEGIP Annuitants)					
	Period Receiving					
Age	Pension Annuity	SEGIP Election Rate				
Less than 65	Less than 2 years	60%				
Less than 65	2 years +	30%				
65 to 69	Any Period	20%				
70 to 74	Any Period	10%				
75 or more	Any Period	0%				

Children of retired members are valued explicitly assuming coverage ends at age 23. Disabled children are assumed to receive benefits during their lifetime.

One hundred percent of covered spouses are assumed to continue coverage after the death of the retiree.

Costs for future retirees are based on blended plan costs with the following assumed coverage:

_	SEGIP Blended Plan Costs				
Group	QCHP	ΟΑΡ	НМО	Total	
SERS/SURS/TRS	30%	30%	40%	100%	
JRS/GARS	80%	10%	10%	100%	



Pension-Related Assumptions

The pension-related assumptions were based on those used for the most recent actuarial valuation of each respective retirement system.

The rates used for the pension valuations of SERS, SURS, TRS, JRS, and GARS, were applied to the SEGIP OPEB valuation.

Deferred vested members are assumed to commence benefits at earliest eligibility.

Medicare eligible members are assumed to participate in the MAPD one month after attaining age 65.



Mortality:

Mortality assumptions for general employees and retirees covered under the Regular Benefit Formula are shown in the following table:

General Employees and Retirees	Base Mortality Table	Male Set Back Years	Female Set Back Years	Male Scaling Factor	Female Scaling Factor
Pre-retirement	Pub-2010 General Employee, sex distinct	2	1	89%	95%
Post-retirement	Pub-2010 General Healthy Retiree sex distinct	0	-1	111%	111%

Mortality assumptions for Public Safety employees and retirees covered under the Alternative Benefit Formula are shown in the following table.

Public Safety Employees and Retirees	Base Mortality Table	Male Set Back Years	Female Set Back Years	Male Scaling Factor	Female Scaling Factor
Pre-retirement	Pub-2010 Public Safety Employee, sex distinct	0	0	96%	108%
Post-retirement	Pub-2010 Public Safety Healthy Retiree, sex distinct	0	0	110%	105%

Future mortality improvements are reflected by projecting the base mortality tables forward from the year 2010 using the fully generational MP-2018 projection scale. This assumption provides a margin for future mortality improvements.



Termination:

Illustrative rates of withdrawal from the plan are as follows for Tier One members:

Service Based Withdrawal					
	Regular Form	ula Employees	Alternate Form	nula Employees	
Service (Beginning					
of Year)	Males	Females	Males	Females	
0	0.2400	0.2200	0.0525	0.0700	
1	0.0900	0.0900	0.0425	0.0700	
2	0.0750	0.0650	0.0425	0.0650	
3	0.0650	0.0550	0.0425	0.0600	
4	0.0600	0.0450	0.0425	0.0600	
5	0.0460	0.0450	0.0300	0.0500	
6	0.0450	0.0400	0.0300	0.0400	
7	0.0400	0.0400	0.0300	0.0300	
8	0.0300	0.0350	0.0200	0.0200	
9	0.0300	0.0350	0.0200	0.0200	
10	0.0300	0.0300	0.0150	0.0200	
11	0.0250	0.0300	0.0150	0.0175	
12	0.0250	0.0250	0.0150	0.0175	
13	0.0250	0.0250	0.0150	0.0175	
14	0.0200	0.0250	0.0150	0.0175	
15	0.0200	0.0250	0.0150	0.0175	
16	0.0200	0.0200	0.0150	0.0150	
17	0.0200	0.0200	0.0150	0.0150	
18	0.0200	0.0200	0.0150	0.0150	
19	0.0200	0.0200	0.0125	0.0125	
20	0.0200	0.0150	0.0125	0.0125	
21	0.0200	0.0150	0.0125	0.0125	
22	0.0200	0.0150	0.0125	0.0125	
23	0.0200	0.0150	0.0125	0.0125	
24	0.0150	0.0150	0.0100	0.0100	
25	0.0150	0.0100	0.0100	0.0100	
26	0.0150	0.0100	0.0100	0.0100	
27	0.0150	0.0100	0.0100	0.0100	
28	0.0150	0.0100	0.0100	0.0100	
29	0.0150	0.0100	0.0100	0.0100	
30+	0.0150	0.0100	0.0100	0.0100	

It is assumed that terminated employees will not be rehired. The rates apply only to employees who have not fulfilled the service requirement necessary for retirement at any given age.



Salary Increases:

Illustrative rates of increase per individual employee per annum, compounded annually:

Age	Annual Increase		
25	7.17%		
30	5.70%		
35	4.80%		
40	4.47%		
45	4.08%		
50	3.76%		
55	3.55%		
60	3.35%		
65	2.97%		
70	2.75%		

Disability:

Under the pension valuation, disability is valued as a term cost only. No rates were applied.



Retirement – Tier 1:

Employees are assumed to retire in accordance with the rates shown below. The rates apply to employees who have fulfilled the service requirement necessary for retirement at any given age.

Retirement Rates for Regular Formula Employees				
Age	Males	Females		
50	15.00%	27.50%		
51	25.00%	27.50%		
52	25.00%	35.00%		
53	25.00%	27.50%		
54	25.00%	22.50%		
55	25.00%	25.00%		
56	18.00%	24.00%		
57	18.00%	19.00%		
58	18.00%	19.00%		
59	18.00%	19.00%		
60	13.00%	17.00%		
61	12.00%	13.50%		
62	20.00%	23.00%		
63	17.50%	19.00%		
64	17.50%	20.00%		
65	25.00%	25.00%		
66	25.00%	29.00%		
67	25.00%	27.00%		
68	25.00%	27.00%		
69	25.00%	22.00%		
70	25.00%	22.00%		
71	20.00%	22.00%		
72	20.00%	22.00%		
73	20.00%	22.00%		
74	20.00%	22.00%		
75	100.00%	100.00%		

Early Retirement Rates for Regular Formula Employees				
Age	Males	Females		
55	3.50%	2.00%		
56	3.50%	3.00%		
57	5.00%	4.00%		
58	6.00%	5.00%		
59	6.50%	6.00%		



Summary of Actuarial Assumptions and Methods SERS Pension-Related Assumptions

	Retirement Rates for Alternate Formula Employees						
	Eligible for Alternate I	ormula Benefits Only	Eligible for Regular F	ormula Benefits Only			
Age	Males	Females	Males	Females			
50	65.00%	42.50%	N/A	N/A			
51	50.00%	30.00%	N/A	N/A			
52	40.00%	25.00%	N/A	N/A			
53	40.00%	25.00%	N/A	N/A			
54	35.00%	25.00%	N/A	N/A			
55	42.00%	45.00%	N/A	N/A			
56	30.00%	30.00%	N/A	N/A			
57	30.00%	30.00%	N/A	N/A			
58	30.00%	30.00%	N/A	N/A			
59	30.00%	20.00%	N/A	N/A			
60	30.00%	30.00%	4.00%	5.00%			
61	30.00%	25.00%	4.00%	5.00%			
62	30.00%	40.00%	10.00%	18.00%			
63	35.00%	30.00%	11.00%	18.00%			
64	35.00%	40.00%	12.00%	15.00%			
65	35.00%	50.00%	14.00%	25.00%			
66	35.00%	50.00%	20.00%	15.00%			
67	35.00%	50.00%	20.00%	20.00%			
68	35.00%	50.00%	20.00%	30.00%			
69	45.00%	50.00%	20.00%	30.00%			
70	50.00%	50.00%	20.00%	30.00%			
71	50.00%	50.00%	20.00%	30.00%			
72	100.00%	100.00%	100.00%	100.00%			

Spouse and Marriage Assumptions:

85.0 percent of active male participants and 65.0 percent of active female participants are assumed to be married. Actual marital status at benefit commencement is used for retirees. If no data is available, the female spouse is assumed to be three years younger than the male spouse.



Assumptions as a Result of Public Act 96-0889 Adopted June 30, 2016

Retirement rates for members hired after December 31, 2010, who are eligible for regular formula benefits will retire according to the following age-based retirement rates:

Retireme	Retirement Rates for Regular Formula Employees - Tier 2 Members					
Age	Males	Age	Females			
67	50.00%	62	30.00%			
68	35.00%	63	15.00%			
69	35.00%	64	15.00%			
70	35.00%	65	15.00%			
71	20.00%	66	15.00%			
72	20.00%					
73	20.00%					
74	20.00%					
75	100.00%					

Members hired after December 31, 2010, eligible for the alternate formula benefits will retire according to the following age-based retirement rates:

Retireme	Retirement Rates for Alternate Formula Employees			
Age	Males	Females		
60	50.00%	50.00%		
61	30.00%	25.00%		
62	30.00%	40.00%		
63	35.00%	30.00%		
64	35.00%	40.00%		
65	35.00%	50.00%		
66	35.00%	50.00%		
67	35.00%	50.00%		
68	35.00%	50.00%		
69	45.00%	50.00%		
70	50.00%	50.00%		
71	50.00%	50.00%		
72	100.00%	100.00%		



Illustrative rates of withdrawal from the plan are as follows for members hired after December 31, 2010:

Service Based Withdrawal				
	Regular Form	ula Employees	Alternate Form	ula Employees
Service (Beginning				
of Year)	Males	Females	Males	Females
0	0.3000	0.2700	0.0800	0.1100
1	0.1650	0.1600	0.0700	0.0800
2	0.0700	0.0900	0.0575	0.0700
3	0.0700	0.0800	0.0550	0.0600
4	0.0650	0.0750	0.0325	0.0500
5	0.0550	0.0650	0.0300	0.0500
6	0.0500	0.0600	0.0300	0.0500
7	0.0500	0.0500	0.0300	0.0325
8	0.0300	0.0350	0.0200	0.0200
9	0.0300	0.0350	0.0200	0.0200
10	0.0300	0.0300	0.0150	0.0200
11	0.0250	0.0300	0.0150	0.0175
12	0.0250	0.0250	0.0150	0.0175
13	0.0250	0.0250	0.0150	0.0175
14	0.0200	0.0250	0.0150	0.0175
15	0.0200	0.0250	0.0150	0.0175
16	0.0200	0.0200	0.0150	0.0150
17	0.0200	0.0200	0.0150	0.0150
18	0.0200	0.0200	0.0150	0.0150
19	0.0200	0.0200	0.0125	0.0125
20	0.0200	0.0150	0.0125	0.0125
21	0.0200	0.0150	0.0125	0.0125
22	0.0200	0.0150	0.0125	0.0125
23	0.0200	0.0150	0.0125	0.0125
24	0.0150	0.0150	0.0100	0.0100
25	0.0150	0.0100	0.0100	0.0100
26	0.0150	0.0100	0.0100	0.0100
27	0.0150	0.0100	0.0100	0.0100
28	0.0150	0.0100	0.0100	0.0100
29	0.0150	0.0100	0.0100	0.0100
30+	0.0150	0.0100	0.0100	0.0100



Mortality:

The mortality assumptions are as follows:

Members classified as an employee type of academic:

		Male Scaling	Female Scaling
Applicable Group	Base Mortality Table	Factor	Factor
Pre-retirement	Pub-2010 Employee Mortality	101%	97%
	Table (for Teachers)		
Post-retirement	Pub-2010 Healthy Retiree	99%	105%
(non-disabled)	Mortality Table (for Teachers)		
Post-retirement	Pub-2010 Disabled Retiree	112%	110%
(disabled)	Mortality Table (for Non-Safety		
	Employees)		

Members classified as an employee type of non-academic:

Applicable Group	Base Mortality Table	Male Scaling Factor	Female Scaling Factor
Pre-retirement	Pub-2010 Employee Mortality Table (for General Employees)	114%	105%
Post-retirement (non-disabled)	Pub-2010 Healthy Retiree Mortality Table (for General Employees)	99%	107%
Post-retirement (disabled)	Pub-2010 Disabled Retiree Mortality Table (for Non-Safety Employees)	112%	110%

Future mortality improvements are reflected by projecting the base mortality tables from 2010 using the Society of Actuaries (SOA) MP-2020 projections scale. The assumptions are generational mortality tables and include a margin for improvement.



Summary of Actuarial Assumptions and Methods SURS Pension-Related Assumptions

Termination:

Termination Rates				
Years of Service	Academic	Non-Academic		
0	15.00%	15.00%		
1	15.00%	15.00%		
2	12.00%	15.00%		
3	11.00%	14.00%		
4	10.00%	12.00%		
5	9.00%	10.00%		
6	8.00%	9.00%		
7	7.00%	8.00%		
8	6.00%	7.00%		
9	5.00%	6.00%		
10	4.00%	5.00%		
11	4.00%	5.00%		
12	3.00%	3.50%		
13	3.00%	3.50%		
14	3.00%	3.50%		
15	2.50%	3.00%		
16	2.50%	3.00%		
17	2.50%	3.00%		
18	2.50%	3.00%		
19	2.50%	3.00%		
20	2.00%	2.00%		
21	2.00%	2.00%		
22	2.00%	2.00%		
23	2.00%	2.00%		
24	2.00%	2.00%		
25	1.50%	1.50%		
26	1.50%	1.50%		
27	1.50%	1.50%		
28	1.50%	1.50%		
29	1.50%	1.50%		

Illustrative rates are as follows:

A Termination rate of 100 percent is assumed at three years of service for members classified as part time for valuation purposes.

Members who terminate with at least five years of service (10 years of service for members hired on or after January 1, 2011) are assumed to elect the most valuable option on a present value basis – refund of contributions or a deferred benefit.

Termination rate for 29 years of service used for members hired on or after January 1, 2011, until retirement eligibility is met.



Salary Increases:

Each member's compensation is assumed to increase by 3.00 percent each year, 2.25 percent reflecting salary inflation and 0.75 percent reflecting standard of living increases. That rate is increased for member with less than 35 years of service to reflect merit, longevity, and promotion increases. The rates are based on service at the beginning of the year and are as follows:

	Total Increase			
Service Year	Under Age 50	50 and Older		
0	12.75%	12.00%		
1	12.75%	12.00%		
2	9.00%	8.25%		
3	7.75%	7.00%		
4	6.75%	6.00%		
5	6.25%	5.50%		
6	6.00%	5.25%		
7	5.50%	4.75%		
8-10	5.00%	4.25%		
11-14	4.50%	3.75%		
15-18	4.25%	3.50%		
19	4.00%	3.25%		
20-33	3.75%	3.25%		
34+	3.50%	3.00%		



Disability:

Illustrative rates are as follows:

	Academic		Non-Ac	ademic
Age	Male	Female	Male	Female
20	0.007410%	0.016400%	0.024700%	0.037720%
21	0.007590%	0.017350%	0.025300%	0.039905%
22	0.007770%	0.018300%	0.025900%	0.042090%
23	0.007950%	0.019250%	0.026500%	0.044275%
24	0.008130%	0.020200%	0.027100%	0.046460%
25	0.008310%	0.021150%	0.027700%	0.048645%
26	0.008490%	0.022100%	0.028300%	0.050830%
27	0.008670%	0.023050%	0.028900%	0.053015%
28	0.008850%	0.024050%	0.029500%	0.055315%
29	0.009000%	0.025000%	0.030000%	0.057500%
30	0.009450%	0.027050%	0.031500%	0.062215%
31	0.009900%	0.029100%	0.033000%	0.066930%
32	0.010350%	0.031150%	0.034500%	0.071645%
33	0.010770%	0.033200%	0.035900%	0.076360%
34	0.011220%	0.035250%	0.037400%	0.081075%
35	0.011850%	0.037250%	0.039500%	0.085675%
36	0.012450%	0.039300%	0.041500%	0.090390%
37	0.013080%	0.041350%	0.043600%	0.095105%
38	0.013710%	0.043400%	0.045700%	0.099820%
39	0.014310%	0.045450%	0.047700%	0.104535%
40	0.016080%	0.047500%	0.053600%	0.109250%
41	0.017850%	0.049550%	0.059500%	0.113965%
42	0.019620%	0.051600%	0.065400%	0.118680%
43	0.021390%	0.053650%	0.071300%	0.123395%
44	0.023160%	0.055700%	0.077200%	0.128110%
45	0.025350%	0.057750%	0.084500%	0.132825%
46	0.027570%	0.059800%	0.091900%	0.137540%
47	0.029790%	0.061850%	0.099300%	0.142255%
48	0.031980%	0.063900%	0.106600%	0.146970%
49	0.034200%	0.065950%	0.114000%	0.151685%
50	0.036420%	0.068000%	0.121400%	0.156400%
51	0.038610%	0.070050%	0.128700%	0.161115%
52	0.040830%	0.072100%	0.136100%	0.165830%
53	0.043050%	0.074150%	0.143500%	0.170545%
54	0.045240%	0.076200%	0.150800%	0.175260%
55 & Older	0.046560%	0.078250%	0.155200%	0.179975%

Disability rates apply during the retirement eligibility period.

Members are assumed to first receive disability benefits (DB) and then receive disability retirement annuity (DRA) benefits.



Retirement:

Upon eligibility, active members are assumed to retire as follows:

				nuary 1, 2011 and	-	ad) Datiromant
		Normal (Unreduced) Retirement Academic Non-Academic				ed) Retirement
					Academic	Non-Academic
Age	Under 40	40+ Years	Under 40	40+ Years		
Under 50	55.0%	-	55.0%	-		
50	55.0%	-	40.0%	-		
51	40.0%	-	30.0%	-		
52	40.0%	-	30.0%	-		
53	30.0%	-	30.0%	-		
54	30.0%	-	30.0%	-		
55	20.0%	30.0%	25.0%	37.5%		
56	20.0%	30.0%	25.0%	37.5%	4.0%	8.0%
57	20.0%	30.0%	25.0%	37.5%	4.0%	5.5%
58	20.0%	30.0%	25.0%	37.5%	4.0%	5.5%
59	20.0%	30.0%	25.0%	37.5%	4.0%	5.5%
60	13.0%	19.5%	20.0%	30.0%	4.0%	7.0%
61	13.0%	19.5%	15.0%	22.5%		
62	13.0%	19.5%	15.0%	22.5%		
63	13.0%	19.5%	15.0%	22.5%		
64	13.0%	19.5%	15.0%	22.5%		
65	17.0%	25.5%	25.0%	37.5%		
66	17.0%	25.5%	25.0%	37.5%		
67	17.0%	25.5%	25.0%	37.5%		
68	17.0%	25.5%	25.0%	37.5%		
69	17.0%	25.5%	25.0%	37.5%		
70	17.0%	25.5%	20.0%	30.0%		
71-79	15.0%	22.5%	20.0%	30.0%		
80+	100.0%	100.0%	100.0%	100.0%		

The Non-Academic retirement rates apply to Police and Firefighters.



Summary of Actuarial Assumptions and Methods SURS Pension-Related Assumptions

	Members Hired on or after January 1, 2011 and Eligible for					
	Normal (Unreduced) Retirement			Early (Reduce	ed) Retirement	
Age	Academic	Non-Academic	Police	Academic	Non-Academic	
60			60.0%			
61			25.0%			
62			25.0%	25.0%	35.0%	
63			25.0%	10.0%	15.0%	
64			25.0%	10.0%	15.0%	
65			15.0%	10.0%	15.0%	
66			15.0%	10.0%	15.0%	
67	35.0%	35.0%	15.0%			
68	17.0%	25.0%	25.0%			
69	17.0%	25.0%	25.0%			
70	17.0%	20.0%	20.0%			
71-79	15.0%	20.0%	20.0%			
80+	100.0%	100.0%	100.0%			

A rate equal to 1.5 times rate shown for members the hired on or after January 1, 2011 is used if the member has 40 or more years of service and is younger than 80 years old. The rates shown above for members the hired on or after January 1, 2011, are for members with less than 40 years of service.

Members who retire are assumed to elect the most valuable option on a present value basis – refund of contributions (or portable lump sum retirement, if applicable) or a retirement annuity.

For purposes of the projections in the actuarial valuation, members of the Retirement Savings Plan are assumed to retire in accordance with the Tier 1 and Tier 2 retirement rates (based on hire date).

Spouse and Marriage Assumptions:

Members are assumed to be married in the following proportions:

N	Marriage Assumption					
Age	Males	Females				
20-24	10.00%	25.00%				
25-29	35.00%	45.00%				
30-34	60.00%	65.00%				
35-39	70.00%	70.00%				
40-44	75.00%	75.00%				
45-59	80.00%	75.00%				
60-89	80.00%	70.00%				



Demographic Assumptions:

Healthy Life Mortality, Post-Retirement

PubT-2010 Retiree Mortality Table projected generationally with Scale MP-2020, with female rates multiplied by 91% for ages under 75 and 109% for ages 75 and older and male rates multiplied by 105% for ages under 85 and 115% for ages 85 and older. (Adopted effective June 30, 2021.)

Healthy Life Mortality, Post-Retirement Beneficiary

Pub-2010 Contingent Survivor Mortality Table projected generationally with Scale MP-2020, with female rates multiplied by 98% for all ages and male rates multiplied by 110% for all ages. (Adopted effective June 30, 2021.)

Healthy Life Mortality, Pre-Retirement

PubT-2010 Employee Mortality Table projected generationally with Scale MP-2020, with female and male rates multiplied by 90% for all ages. (Adopted effective June 30, 2021.)

Disabled Life Mortality, Post-Retirement

PubNS-2010 Non-Safety Disabled Retiree Mortality Table projected generationally with Scale MP-2020, with no adjustments to female or male rates. (Adopted effective June 30, 2021.)

Mortality rates shown above are those applicable for the 2021 valuation (i.e., projected from 2010 to 2021 on a generational basis using MP-2020 improvement scale).



Termination:

Illustrative rates are as follows:

		ample Turnove		
	% Se	parating Within	n Next Year	
	Under 5 Yea	ars of Service	5 or More Ye	ears of Service
Age	Male	Female	Male	Female
25	6.5%	6.3%	4.5%	4.5%
30	6.8%	6.8%	3.0%	4.3%
35	7.0%	7.3%	1.5%	2.5%
40	9.5%	7.3%	1.5%	1.3%
45	11.3%	7.3%	1.0%	1.0%
50	11.8%	8.5%	1.0%	1.3%
55	11.3%	10.3%	1.8%	2.0%
60	12.3%	13.0%	3.5%	2.3%
65	29.3%	32.5%	3.5%	2.5%

Salary Increases:

Service	Annual Increase
1	8.50%
2	6.75%
3	6.25%
4	6.25%
5	6.00%
6	5.75%
7	5.50%
8	5.50%
9	5.25%
10	5.00%
11	5.00%
12	4.75%
13	4.50%
14	4.50%
15	4.50%
16	4.25%
17	4.00%
18	4.00%
19	3.75%
20 & above	3.50%



Summary of Actuarial Assumptions and Methods TRS Pension-Related Assumptions

Disability:

Illustrative rates are as follows:

Sample Disability Rates				
% Separating Within Next Year				
Age Male Female				
0.01%	0.02%			
0.01%	0.03%			
0.02%	0.05%			
0.02%	0.06%			
0.04%	0.09%			
0.08%	0.15%			
0.11%	0.17%			
0.14%	0.23%			
0.19%	0.26%			
	parating Within Male 0.01% 0.01% 0.02% 0.02% 0.02% 0.04% 0.08% 0.11% 0.14%			



Summary of Actuarial Assumptions and Methods TRS Pension-Related Assumptions

Retirement:

	Sample Normal Retirement Rates				
% Se	% Separating Within Next Year (Age-Based)				
	Service				
<u>Age</u>	<u>5 - 18</u>	<u> 19 - 29</u>	<u>30-33</u>	<u>34 +</u>	
54	0%	7%	8%	45%	
55	0%	6%	8%	44%	
56	0%	6%	7%	46%	
57	0%	7%	8%	46%	
58	0%	8%	12%	45%	
59	0%	33%	40%	48%	
60	21%	33%	46%	44%	
61	17%	28%	35%	41%	
62	17%	28%	43%	41%	
63	16%	29%	35%	44%	
64	26%	40%	50%	40%	
65	27%	40%	52%	43%	
66	23%	42%	42%	38%	
67	25%	39%	43%	38%	
68	23%	39%	40%	35%	
69	28%	38%	32%	44%	
70	100%	100%	100%	31%	
71	100%	100%	100%	39%	
72	100%	100%	100%	24%	
73	100%	100%	100%	36%	
74	100%	100%	100%	36%	
75 & older	100%	100%	100%	100%	



	Sampl	le Normal Ret	tirement Rat	tes	
	% Separati	ng Within Ne	xt Year (Age	-Based)	
			Service		
Age	<u>9 - 18</u>	<u> 19 - 30</u>	<u>31</u>	<u>32 - 33</u>	<u>34 +</u>
61 and younger	0%	0%	0%	0%	0%
62	13%	15%	20%	25%	25%
63	8%	10%	15%	20%	20%
64	8%	10%	15%	20%	20%
65	8%	10%	15%	20%	20%
66	20%	10%	15%	20%	20%
67	20%	40%	70%	70%	70%
68	20%	40%	40%	40%	40%
69	20%	40%	40%	40%	40%
70	100%	100%	100%	100%	100%

The following assumptions apply to members hired on or after January 1, 2011.

Spouse and Marriage Assumptions:

80.0 percent of active male participants and 70.0 percent of active female participants are assumed to be married. If no data is available, the female spouse is assumed to be three years younger than the male spouse.



Mortality:

Post-Retirement Mortality

JRS: Pub-2010 Above-Median Income General Healthy Retiree Mortality tables, sex distinct, with scaling factors of 102 percent for males and 98 percent for females, and the MP-2018 two-dimensional generational mortality improvement scale. This assumption provides a margin for future mortality improvements.

GARS: Pub-2010 Above-Median Income General Healthy Retiree Mortality tables, sex distinct, with scaling factors of 99 percent for males and females, and the MP-2018 two-dimensional generational mortality improvement scale. This assumption provides a margin for future mortality improvements.

Pre-Retirement Mortality, including terminated vested members prior to attaining age 50

JRS: Pub-2010 Above-Median Income General Employee Mortality tables, sex distinct, with scaling factors of 99 percent for males and females, and the MP-2018 two-dimensional generational mortality improvement scale. This assumption provides a margin for future mortality improvements.

GARS: Pub-2010 Above-Median Income General Employee Mortality tables, sex distinct, with no scaling factors, and the MP-2018 two-dimensional generational mortality improvement scale. This assumption provides a margin for future mortality improvements.

JRS/GARS: Future mortality improvements are reflected by projecting the base mortality tables forward from the year 2010 using the MP-2018 projection scale.

Termination:

GARS: Rates of withdrawal are assumed to be equal to six percent for all ages 20 through 65.

Sample Withdrawal Rates				
Age	Male	Female		
30	0.0129	0.0162		
35	0.0124	0.0162		
40	0.0108	0.0162		
45	0.0095	0.0162		
50	0.0083	0.0158		
55	0.0071	0.0092		
60	0.0059	0.0074		
65	0.0047	0.0057		

JRS: Illustrative rates of withdrawal from the plan are as follows:

JRS/GARS: It is assumed that terminated employees will not be rehired. The rates apply only to employees who have not fulfilled the service requirement necessary for retirement at any given age.

Salary Increases:

JRS/GARS: A salary increase assumption of 2.50 percent per year, compounded annually, was used. This 2.50 percent salary increase assumption includes an inflation component of 2.25 percent per year, and a productivity/merit/promotion component of 0.25 percent.



Disability:

JRS/GARS: No assumption for disability.

Retirement:

Rates only apply to employees who have fulfilled the service requirement necessary for retirement at any given age.

JRS: Employees are assumed to retire in accordance to the rates shown below:

Retirement Rates		
Age Males & Females		
60	9.00%	
61-65	11.00%	
66-70 12.00%		
71-74	13.00%	
75-79	14.00%	
80+	100.00%	

Early Retirement Rates			
Age	Male	Female	
55	5.50%	8.50%	
56	5.50%	8.50%	
57	5.50%	8.50%	
58	5.50%	8.50%	
59	5.50%	8.50%	

GARS: Employees are assumed to retire in accordance to the rates shown below.

Retirement Rates		
Age Male & Female		
55	5.00%	
56-64 15.00%		
65-74	20.00%	
75	100.00%	

Spouse and Marriage Assumptions:

JRS: 80.0 percent of active and retired participants are assumed to be married. If no data is available, the female spouse is assumed to be four years younger than the male spouse.

GARS: 75.0 percent of active and retired participants are assumed to be married. If no data is available, the female spouse is assumed to be four years younger than the male spouse.



SECTION F

SUMMARY OF PRINCIPAL PLAN PROVISIONS

PLAN MEMBERS

Members receiving monthly benefits from the State Employees' Retirement System of Illinois (SERS), State Universities Retirement System of Illinois (SURS), Teachers' Retirement System of Illinois (TRS), General Assembly Retirement System (GARS), or the Judges' Retirement System of Illinois (JRS) are eligible to enroll in SEGIP. Certain members covered under TRS for pension purposes are eligible for retiree healthcare benefits under the Teachers' Retirement Insurance Program (TRIP). Other TRS members eligible for coverage under SEGIP include: certified teachers working for certain State agencies, executives working for the Board of Education, regional superintendents, regional assistant superintendents, TRS fund staff, and certain members with certain reciprocal service.

PENSION ELIGIBILITY PROVISIONS

STATE EMPLOYEES RETIREMENT SYSTEM

Normal Retirement

General formula members are eligible to retire with unreduced benefits after completing one of the following: i) age 60 with 8 years of service, ii) 35 years of service or iii) age plus service is at least 85. Alternate formula members are eligible to retire with unreduced after completing one of the following: i) age 50 with 25 years of service or ii) age 55 with 20 years of service.

Early Retirement

General formula members are eligible to retire with reduced benefits after attaining age 55 and earning at least 25 years of service.

Disability Retirement

There is no specific age or service requirement for receipt of occupational disability benefits. Receipt of non-occupational disability benefits has an eligibility requirement of one- and one-half years of service.

Vested Termination

Members who terminate are eligible to receive pension benefits after attaining age 60 with at least 8 years of service or at any age with at least 35 years of service.

Provisions Applicable to Members Hired after December 31, 2010, as a result of Public Act 96-0889

Retirement Eligibility – All Members Except State policemen, fire fighters in the fire protection service of a department or security employees of the Department of Corrections or the Department of Juvenile Justice

Normal retirement – 67 years old with 10 years of service.



Early Retirement - 62 years old with 10 years of service with a 6.0 percent per year reduction in benefit for each year age is under 67.

Retirement Eligibility – State policemen, fire fighters in the fire protection service of a department or security employees of the Department of Corrections or the Department of Juvenile Justice

Normal retirement – 60 years old with 20 years of service.



STATE UNIVERSITIES RETIREMENT SYSTEM

Normal Retirement

Police officers and fire fighters are eligible to retire with unreduced benefits after completing one of the following: i) age 55 with 20 years of service or ii) age 50 with 25 years of service. Other members hired before January 1, 2011, are eligible to retire with unreduced benefits after completing one of the following: i) age 62 with 5 years of service, ii) age 60 with 8 years of service or iii) 30 years of service.

For members hired on or after January 1, 2011, separation from service on or after attainment of age 67 with 10 years of service.

Early Retirement

Members hired before January 1, 2011, other than police and fire employees, are eligible to retire with reduced benefits after attaining age 55 and earning at least 8 years of service. For members hired on or after January 1, 2011, separation from service on or after attainment of age 62 with 10 years of service.

Disability Retirement

There is no specific age or service eligibility requirement for receipt of accidental disability benefits. Receipt of non-accidental disability benefits has an eligibility requirement of two years of service.

Vested Termination

Members hired before January 1, 2011, who terminate with at least 5 years of service are eligible to receive pension benefits under either the normal or early retirement provisions. Members hired on or after January 1, 2011, are vested after 10 years of service.



TEACHERS' RETIREMENT SYSTEM

Normal Retirement

Members hired before January 1, 2011, are eligible to retire with unreduced benefits after completing one of the following: i) age 60 with 10 years of service, ii) age 62 with 5 years of service or iii) age 55 with 35 years of service.

Age 67 with 10 years of service for members hired on or after January 1, 2011.

Early Retirement

Members hired before January 1, 2011, are eligible to retire with reduced benefits after attaining age 55 and earning at least 20 years of service.

Age 62 with 10 years of service for members hired on or after January 1, 2011.

Disability Retirement

There is no specific age or service requirement for receipt of occupational disability benefits. Receipt of non-occupational disability benefits requires termination of temporary disability benefits and member remains disabled.

Vested Termination

Members who terminate with more than five years of service are eligible to receiving retirement pension benefits at age 62 if service is less than 10 and at age 60 if service is at least 10.

Members hired on or after January 1, 2011, are vested after 10 years of service.



GENERAL ASSEMBLY RETIREMENT SYSTEM

Normal Retirement

Members hired before January 1, 2011, are eligible to retire with full benefits after completing one of the following: i) age 55 with 8 years of service or ii) age 62 with 4 years of service. Age 67 with 8 years of service for members hired on or after January 1, 2011.

Early Retirement

Members hired on or after January 1, 2011, are eligible to retire with reduced benefits after attaining age 62 and earning at least 8 years of service.

Disability Retirement

Members are eligible for disability benefits after completing 8 years of service.

Vested Termination

Members hired before January 1, 2011, who terminate with at least 4 years of service are eligible to receive pension benefits under the normal retirement provisions. Members hired on or after January 1, 2011, are vested after 8 years of service.

JUDGES' RETIREMENT SYSTEM

Normal Retirement

Members hired before January 1, 2011, are eligible to retire with unreduced benefits after completing one of the following: i) age 55 with 26 years of service, ii) age 60 with 10 years of service or iii) age 62 with 6 years of service.

Age 67 with 8 years of service for members hired on or after January 1, 2011.

Early Retirement

Members hired before January 1, 2011 are eligible to retire with reduced benefits after completing age 55 with 10 years of service.

Age 62 with 8 years of service for members hired on or after January 1, 2011.

Disability Retirement

Members are eligible for disability benefits after completing 10 years of service.



Vested Termination

Members hired before January 1, 2011, who terminate with at least 6 years of service are eligible to receive pension benefits under either the normal or early retirement provisions.

Members hired on or after January 1, 2011, are vested after 8 years of service.



DEPENDENTS ELIGIBLE FOR COVERAGE

If a plan member enrolls in SEGIP, they may enroll the following dependents: spouses; same-sex domestic partner (enrolled prior to June 1, 2011); civil union partner (enrolled on or after June 1, 2011); unmarried children under age 26; disabled children that have been continuously disabled from causes originating prior to age 26 and are financially dependent for at least one-half of their support, and eligible to be claimed on income tax return; and parents if they are financially dependent for at least one-half of their support and eligible to be claimed on income tax return.

ENROLLMENT TIMING

Members who have not previously enrolled in SEGIP are eligible to enroll when they begin receiving pension benefits through one of the State sponsored pension programs, during any annual open enrollment period, when turning 65 or becoming Medicare eligible, or after losing coverage by a former plan. Members and beneficiaries who previously were enrolled in SEGIP, and subsequently waive coverage, are only eligible to reenroll due to the loss of prior coverage by a former plan or at the attainment of age 65 or when Medicare eligible.

SURVIVING SPOUSE COVERAGE

Spouses of employees/retirees who die are eligible to maintain health insurance coverage until the surviving spouse's death. If the surviving spouse elects a monthly benefit, the spouse becomes the member with the same SEGIP rights.

MEDICARE

Coverage through SEGIP becomes secondary to Medicare after Medicare eligibility has been reached. Members must enroll in Medicare Parts A and B to receive the subsidized SEGIP premium available to Medicare eligible participants. SEGIP benefits are coordinated with Medicare as follows:

- i) After Medicare Part A pays, QCHP pays 85% for an In-Network provider and 60% for an Out-of-Network Provider, of the Medicare Part A deductible after the QCHP annual plan deductible has been met.
- ii) After Medicare Part B pays, QCHP pays 85% for an In-Network provider and 60% for an Out-of-Network Provider, of the balance after the QCHP annual plan deductible has been met.

Prescription drug coverage provided by the plan is at least as valuable as benefits provided through Medicare Part D.

DENTAL, VISION, AND LIFE INSURANCE BENEFITS

The State provides postemployment dental, vision, and life insurance benefits. Members eligible for SEGIP healthcare benefits are also eligible for dental and vision benefits. The State provides fully subsidized life insurance benefits to retired and disabled members and their spouses equal to one times pay before retirement if death occurs before age 60, and \$5,000 if death occurs after age 60. Dependent children are eligible for life insurance benefit of \$10,000.



The State offers optional life insurance benefits to retired and disabled members and their spouses. The member is required to pay the full age-based premium.

FUNDING POLICY

OPEB offered through SEGIP are financed through a combination of retiree premiums, State contributions, and Federal government subsidies from the Medicare Part D program. Contributions are deposited in the Health Insurance Reserve Fund, which covers both active State employees and retired members. State contributions are made primarily from the General Revenue Fund on a pay-as-you-go basis and no separate trust has been established for the funding of OPEB. The State recognizes SEGIP OPEB benefits as a single employer defined benefit plan with a special funding situation for employees of the State's component unit universities as defined in GASB Statement No. 75.

OPEB PROGRAMS

Members may elect healthcare coverage in the QHCP, a managed care HMO plan, or an Open Access Plan (OAP). The QHCP is a traditional medical indemnity plan. There are four HMOs offering coverage that varies by location throughout the state. The two OAPs are managed care plans that offer three benefit levels based on the provider used. In addition, there are five Medicare Advantage Prescription Drug (MAPD) plans offering coverage that varies by location throughout the state. A summary of the healthcare benefits provided under the three plan types is shown later in this section. The State also provides postemployment dental, vision, and life insurance benefits which are also summarized later in this section.

Healthcare premium rates for members depend on the date of retirement and the years of service earned at retirement. Members retiring before January 1, 1998, are eligible for single coverage at no cost to the member. Members retiring after January 1, 1998, are eligible for single coverage provided they pay a portion of the premium equal to 5 percent for each of service under 20 years. Eligible dependents receive coverage provided they pay 100 percent of the required dependent premium. The following tables show the premium amounts for healthcare plans for the fiscal year ending June 30, 2022, and June 30, 2023.

Member monthly premium for single coverage in the non-MAPD plans (shared between State and member depending on date of retirement and service at retirement):

FYE 06/30/2022	Pre-Medicare	Medicare
Quality Care Health Plan	\$1,134.94	\$468.62
HMO/OAP Plans	\$946.92	\$524.20

FYE 06/30/2023	Pre-Medicare	Medicare
Quality Care Health Plan	\$1,220.50	\$490.20
HMO/OAP Plans	\$1,052.96	\$582.48



Member monthly premium for single coverage in the MAPD plans (shared between State and member depending on date of retirement and service at retirement):

Medicare MAPD CY	2021	2022
Coventry Advantra, Health Alliance MAPD, and Humana HMOs	\$162.15	\$154.13
UnitedHealthcare PPO	\$156.53	\$143.85

Dependent monthly premiums for the non-MAPD plans (paid fully by dependent):

6/30/2022	One Non- Medicare	Two Non- Medicare	One Medicare	Two Medicare
BlueAdvantage HMO	\$141	\$177	\$120	\$155
Coventry HMO	\$177	\$222	\$154	\$196
Coventry OAP	\$168	\$213	\$145	\$187
Health Alliance HMO	\$177	\$223	\$153	\$197
HealthLink OAP	\$185	\$238	\$161	\$208
HMO Illinois	\$145	\$184	\$124	\$161
Quality Care Health Plan	\$272	\$310	\$165	\$226

Dependent monthly premiums for the MAPD plans (paid fully by dependent):

Medicare MAPD CY One Medicare Dependent	2021	2022
Coventry Advantra, Health Alliance MAPD, and Humana HMOs	\$90	\$90
UnitedHealthcare PPO	\$110	\$110
Medicare MAPD CY Two Medicare Dependents	2021	2022
Coventry Advantra, Health Alliance MAPD, and Humana HMOs	\$126	\$126
UnitedHealthcare PPO	\$155	\$155

Effective as of January 1, 2023, the Aetna MAPD plan will be the only MAPD plan provided to Medicare retirees. For calendar years 2023 through 2027, the member and dependent premium rate is zero before administrative charges.

Annuitants receiving benefits from any state retirement system (SERS, SURS, TRS, JRS, and GARS) who are not eligible for Medicare may waive healthcare coverage from SEGIP and receive a monthly financial incentive. The monthly financial incentive equals \$500 per month if service is greater than or equal to 20 years or \$150 per month if service is less than 20 years.

Participants pay a monthly premium for dental coverage for plan year end 2021 equal to \$12.00 for member only coverage, \$19.00 for member plus one dependent coverage, and \$21.50 for member plus two dependents coverage.

No premiums are required for vision coverage or the basic non-voluntary life insurance benefit.



Quality Care Health Plan (QCHP)

Plan Feature	In	Network		Out	t of Network ¹
Annual Deductible	\$425 per individual, with \$1,000 family cap			per individual, 1,000 family cap	
Annual Out of Pocket Limit	\$1,750 per enrollee, with \$4,375 per family			00 per enrollee, 13,500 per family	
Covered Services	<u>Coi</u>	insurance		<u>Coinsurance</u>	
-Office Visits	85% aft	er deductible		60% after deductible	
-Emergency Room		y, then 85% aft eductible	er	\$450 copay, then 60% after deductible	
-Inpatient Services	\$200 copay, then 85% after deductible		er		bay, then 60% after deductible
-Outpatient Services -Preventive Services -Lab/X-ray -Other	100% after deductible 85% after deductible 85% after deductible			60% a	after deductible after deductible after deductible
	After annual prescription deductible of \$150.			le of \$150.	
QCHP		<u>Retail</u>	F	<u>Retail</u>	<u>Maintenance</u> <u>Choice</u>
Prescription Drug Copays	Tier 1	\$15.00	\$	37.50	\$18.75
	Tier 2	\$35.00	\$	87.50	\$43.75
	Tier 3	\$60.00	\$2	150.00	\$75.00
	Supply	30-days	9(D-days	90-days
Maximum Lifetime Benefit			Unlim	ited	

¹ Out of network claims covered only up to usual and customary amount.



HMO Plans (Non-MAPD)

Plan Feature				
Annual Deductible	\$0			
Covered Services	<u>Coinsurance</u>			
-Physicians Visits	\$30 Copay, then 100%			
-Emergency Care	\$275 Copay, then 100%			
-Inpatient Services	\$400 Copay, then 100%			
-Outpatient Services	\$300 Copay, then 100%			
	After annual prescription deductible of \$125.			
		Preferred Retail	Preferred Retail	
НМО	Reduced Tier 1	\$4.00	\$10.00	
HMO Prescription Drug Copays	Tier 1	\$13.00	\$32.50	
	Tier 2	\$31.00	\$77.50	
	Tier 3	\$55.00	\$137.50	
	Supply	30-days	90-days	
Maximum Lifetime Benefit	Unlimited			



Open Access Plan (OAP)

Plan Feature	Tier I	Tier II	Tier III
Annual Deductible	\$0	\$300 per enrollee ¹	\$400 per enrollee ¹
Annual Out of Pocket Limit	Tier II combined) per enr	3,000 (includes eligible charges from Tier I and er II combined) per enrollee, with \$6,000 ncludes eligible charges from Tier I and Tier II ombined) per family.	
Covered Services	<u>Coinsurance/Copay²</u>	<u>Coinsurance/Copay²</u>	<u>Coinsurance/Copay ³</u>
-Office Visits	\$30 copay	90% of network charges	60% of U&C
-Emergency Room	\$275 copay	\$275 copay	\$275 copay
-Inpatient Services	\$400 copay	\$450 copay, then 90%	\$550 copay, then 60%
-Outpatient Services	\$300 copay	\$300 copay, then 90%	\$300 copay, then 60%
-Lab/X-ray -Other	100% 100%	90% of network charges	60% of U&C
	After annual prescription deductible of \$125.		
	<u></u>	<u>Retail</u> <u>Retail</u>	<u>Maintenance</u> <u>Choice</u>
OAP	Tier 1 \$	13.00 \$32.50	\$16.25
Prescription Drug Copays	Tier 2 \$	31.00 \$77.50	\$38.75
	Tier 3 \$	55.00 \$137.50	\$68.75
	Supply 30	D-days 90-days	90-days
Maximum Lifetime Benefit	Unlimited	Unlimited	Unlimited

¹ An annual plan deductible must be met before plan benefits apply. Benefit limits are measured on a plan year basis.

² Network charges.

³ Usual and customary charges.



HMO Plans (MAPD)

Plan Feature				
Annual Deductible	\$0			
Out of Pocket Maximum		\$3,000 per	enrollee	
Covered Services		<u>Coinsu</u>	irance	
-Physicians Visits		\$20 Copay,	then 100%	
-Emergency Care		\$120 Copay,	, then 100%	
-Inpatient Services		\$350 Copay,	, then 100%	
-Outpatient Services	\$250 Copay, then 100%			
	After annual prescription deductible of \$100.			f \$100.
		<u>Retail</u>	<u>Retail</u>	<u>Retail</u>
	Tier 1	\$8.00	\$16.00	\$20.00
MAPD HMO	Tier 2	\$26.00	\$52.00	\$65.00
Prescription Drug Copays Retail and Mail Order	Tier 3	\$50.00	\$100.00	\$125.00
	Tier 4 Specialty	\$50.00	\$100.00	\$125.00
	Supply	30-days	60-days	90-days
	To obtain a 90-day mail-order supply, copayments are 2.5 times the 30- day supply copayment. Copayments are capped once a member reaches \$7,050 in "true out-of-pocket" prescription drug costs.			
Maximum Lifetime Benefit	Unlimited			



PPO Plan (MAPD)

Plan Feature					
Annual Deductible	\$110				
Out of Pocket Maximum		\$1,300 per enrollee			
Covered Services		<u>Coir</u>	<u>isurance</u>		
-Physicians Visits		85% afte	er deductible		
-Emergency Care		\$120 Cop	ay, then 100%		
-Inpatient Services		85% afte	er deductible		
-Outpatient Services	85% after deductible				
	After annual prescription deductible of \$125.				
		<u>Retail</u>	<u>Retail</u>	<u>Retail</u>	
	Tier 1	\$10.00	\$20.00	\$25.00	
MAPD PPO Prescription Drug Copays Retail and Mail Order	Tier 2	\$30.00	\$60.00	\$75.00	
	Tier 3	\$60.00	\$120.00	\$150.00	
	Tier 4 Specialty	\$60.00	\$120.00	\$150.00	
	Supply	30-days	60-days	90-days	
	To obtain a 90-day mail-order supply, copayments are 2.5 times the 30-day supply copayment. Copayments are capped once a member reaches \$7,050 in "true out-of-pocket" prescription drug costs.				
Maximum Lifetime Benefit	Unlimited				



Quality Care Dental Plan

Plan Feature	
Annual Deductible	
-Preventive and diagnostic services	None
- All other covered services	\$175 per participant
<u>Plan Year Maximum Benefit</u>	
-Preventive and diagnostic services	\$2,500 per participant \$2,500 per participant, in network
- All other covered services	\$2,000 per participant, out of network
Covered Services	
-Preventive and diagnostic	Subject to schedule
-Basic and major benefits	Subject to schedule

Vision Plan

Plan Feature	In-Network	Out-of-Network	Benefit Frequency
Eye Exam	\$30 copay	\$30 allowance	Once every 12 months
Spectacle Lenses (single, bifocal, and trifocal)	\$30 copay	\$50 allowance for single vision and \$80 allowance for bifocal and trifocal	Once every 12 months
Standard Frames	\$30 copay (up to \$175 retail frame cost; member responsible for balance over \$175)	\$70 allowance	Once every 24 months
Contact Lenses (in lieu of standard frames and spectacle lenses)	\$120 allowance	\$120 allowance	Once every 12 months



Life Insurance

Plan Feature	
Basic Life Insurance	
- For annuitants under age 60	One times annual salary as of last day of active State service
- For annuitants over age 60	\$5,000
- For spouse if annuitant age is less than 60	\$10,000
- For spouse if annuitant age is greater than 60	\$5,000
- For dependent child	\$10,000
Member Contribution	None
Other Optional Life Insurance Benefits	Are fully paid by the member using individual age and other rating factors and have been excluded from the valuation



SECTION G

GLOSSARY

Accrued Service. The service credited under the plan, which was rendered before the date of the actuarial valuation.

Actuarial Accrued Liability (AAL). The difference between: (i) the actuarial present value of future plan benefits; and (ii) the actuarial present value of future normal cost, which is sometimes referred to as "accrued liability" or "past service liability."

Actuarial Assumptions. Estimates of future plan experience with respect to rates of mortality, disability, turnover, retirement, rate or rates of investment income, and salary increases. Decrement assumptions (rates of mortality, disability, turnover, and retirement) are generally based on past experience, often modified for projected changes in conditions. Economic assumptions (salary increases and investment income) consist of an underlying rate in an inflation-free environment plus a provision for a long-term average rate of inflation.

Actuarial Cost Method. A mathematical budgeting procedure for allocating the dollar amount of the "actuarial present value of future plan benefits" between the actuarial present value of future normal cost and the actuarial accrued liability. Sometimes referred to as the "actuarial funding method."

Actuarial Equivalent. A single amount or series of amounts of equal value to another single amount or series of amounts, computed on the basis of the rate(s) of interest and mortality tables used by the plan.

Actuarial Present Value. The amount of funds presently required to provide a payment or series of payments in the future. It is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Actuarial Value of Assets. The value of cash, investments, and other property belonging to a pension or OPEB plan, as used by the actuary for the purpose of an actuarial valuation.

Actuarially Determined Contribution (ADC). The ADC is the normal cost plus the portion of the unfunded actuarial accrued liability to be amortized in the current period. The ADC is an amount that is actuarially determined in accordance with the requirements so that, if paid on an ongoing basis, it would be expected to provide sufficient resources to fund both the normal cost for each year and the amortized unfunded liability.

Amortization. Paying off an interest-bearing liability by means of periodic payments of interest and principal, as opposed to paying it off with a lump sum payment.

Annual OPEB Expense. An accrual-basis measure of the periodic cost of an employer's participation in a defined benefit OPEB plan.

Discount Rate. The rate used to adjust a series of future payments to reflect the time value of money.



Glossary

Entry Age Normal Cost Method. A method under which the normal cost and actuarial accrued liability are directly proportional to the employee's salary. The normal cost rate equals the present value of future benefits at entry age divided by the present value of future salary at entry age. The normal cost at the member's attained age equals the normal cost rate at entry age multiplied by the salary at attained age. The actuarial accrued liability equals the present value of benefits at attained age less present value of future salaries at attained age multiplied by normal cost rate at entry age.

Expected Net Employer Contributions. The difference between the age-adjusted premium or expected retiree healthcare claims and retired member's share of the premium. This amount is used to offset the Annual OPEB Cost during the fiscal year.

Explicit Rate Subsidy. The portion of the premium paid by the employer. The premium may be based on the experience of active and retired members or retired members only.

Governmental Accounting Standards Board (GASB). GASB is the private, nonpartisan, nonprofit organization that works to create and improve the rules U.S. state and local governments follow when accounting for their finances and reporting them to the public.

Implicit Rate Subsidy. The de facto subsidy of retirees by permitting them to pay lower than age-adjusted premiums through the use of a single common or blended premium for both retirees and active employees.

Medical Trend Rate (Health Inflation). The increase in the plan's cost over time. Trend includes all elements that may influence a plan's cost, assuming those enrollments and the plan benefits do not change. Trend includes such elements as pure price inflation, changes in utilization, advances in medical technology, and cost shifting.

Normal Cost. The annual cost assigned, under the actuarial funding method, to current and subsequent plan years. Sometimes referred to as "current service cost." Any payment toward the unfunded actuarial accrued liability is not part of the normal cost.

Other Postemployment Benefits (OPEB). OPEB are postemployment benefits other than pensions. OPEB generally takes the form of health insurance and dental, vision, prescription drugs, or other healthcare benefits.

Pay-As-You-Go Funding. A method of financing benefits by making required payments only as they come due.

Plan Member. A plan's membership includes active service employees, terminated employees who are eligible to receive benefits but are not receiving them, and retired employees and beneficiaries currently receiving benefits.

Pre-Funding. A method of financing benefits by placing resources in trust as employees earn benefits so that the resources thus accumulated, along with related earnings, can be used to make benefit payments as they become due.



Glossary

Present Value of all Projected Benefits. The present value of the cost to finance benefits payable in the future, discounted to reflect the expected effects of the time value of money and the probabilities of payment.

Projected Unit Credit Cost Method. A method under which the normal cost and actuarial accrued liability are directly proportional to the employee's service. The normal cost equals the present value of future benefits divided by projected service at retirement, and the actuarial accrued liability equals the present value of benefits multiplied by the ratio of service at valuation date to projected service at retirement.

Qualified Plan. A qualified plan is an employer-sponsored retirement plan that qualifies for special tax treatment under Section 401(a) of the Internal Revenue Code.

Reserve Account. An account used to indicate that funds have been set-aside for a specific purpose and are not generally available for other uses.

Unfunded Actuarial Accrued Liability (UAAL). The difference between the actuarial accrued liability and valuation assets. Sometimes referred to as "unfunded accrued liability."

Valuation Assets. The value of current plan assets recognized for valuation purposes.

