

### REQUIRED SUPPLEMENTARY INFORMATION PENSION PLANS

Required supplementary information for pension plans provides information on the sources of changes in net pension liabilities, information about the components of net pension liabilities, employer contributions, and investment returns.

The Required Supplementary Information for Pension Plans includes the following schedules:

Schedule of Changes in the Net Pension Liability and Related Ratios: Cost-Sharing, Multiple-Employer, Defined Benefit Pension Plans

Schedule of Changes in the Net Pension Liability and Related Ratios: Single-Employer, Defined Benefit Pension Plans

Schedule of Employer and Nonemployer Contributions: Cost-Sharing, Multiple-Employer, Defined Benefit Pension Plans

Schedule of Employer and Nonemployer Contributions: Single-Employer, Defined Benefit Pension Plans

Schedule of Investment Returns: All Defined Benefit Pension Plans

Notes to Required Supplementary Information: Schedule of Employer Contributions

### REQUIRED SUPPLEMENTARY INFORMATION SCHEDULE OF CHANGES IN THE NET PENSION LIABILITY AND RELATED RATIOS COST-SHARING, MULTIPLE-EMPLOYER, DEFINED BENEFIT PENSION PLANS

Last Ten Fiscal Years
(Dollars in Thousands)

\$1,932,122   \$1,916,712   \$1,906,936   \$1,851,086   \$5,860,085   \$1,860,486   \$6,860,085   \$1,860,486   \$1,	(Dollars in Thousands)					
Name		2023	2022	2021	2020	2019
\$1,932,122   \$1,916,712   \$1,906,936   \$1,851,086   \$5,860,085   \$1,860,486   \$6,860,085   \$1,860,486   \$1,	Teachers' and State Employees'					
Indicenses   6,027,474   5,874,188   5,867,546   5,663,045   5,460,42   Changes of benefit terms	Total pension liability	<b>A</b> 4 000 400	<b>A</b> 4040 740	<b>*</b> 4.000.054	<b>A</b> 4.054.050	<b>A</b> 4 700 475
Changes of benefit terms		, , , , ,		, , , , , , ,	. , ,	. , ,
Changes of assumptions	Changes of benefit terms			-	-	-
Benefit payments, including refunds of member contributions   (5,638,727)   (5,324,253)   (5,055,075)   (4,934,999)   (4,855,146)   (1,043,147)   (1,043,1	Differences between expected and actual experience		(175,206)	, ,	258,502 -	535,860 -
Total pension liability - beginning   93,572,242   91,073,632   86,164,011   83,326,405   83,426,405   83,4	Benefit payments, including refunds of member contributions	(5,636,727)	(5,324,253)		(4,934,999)	(4,835,144)
	Net change in total pension liability	4,348,795	2,498,610	4,909,621	2,837,606	2,943,618
Plan fiduciary net position	Total pension liability - beginning	93,572,242	91,073,632	86,164,011	83,326,405	80,382,787
South   Sout	Total pension liability - ending (a)	\$ 97,921,037	\$ 93,572,242	\$ 91,073,632	\$ 86,164,011	\$ 83,326,405
Doubtitions-member   1,009,460   1,009,460   4,007,5935   6,118,110   1,023,636   3,050,585   4,514,110   1,023,636   3,050,585   4,514,110   1,023,636   3,050,585   4,514,110   1,023,636   3,050,585   4,514,110   1,023,636   3,050,585   4,514,110   1,023,636   3,050,585   4,514,110   1,023,636   3,050,585   4,514,110   1,023,636   3,050,585   4,514,110   1,023,630,110   1,023,030,110   1,023,	Plan fiduciary net position					
Not investment income	Contributions-employer	. , ,	. , ,	. , ,	. , ,	. , ,
Renefit payments, including refunds of member contributions   (5,336,727)   (5,334,253)   (5,055,075)   (4,934,999)   (4,835,144   (4)						
Administrative expense (16,093) (13,945) (13,947) (12,910) (11,816) (11) (11) (11) (11) (11) (11) (11) (			, , ,	, ,	, ,	
Net change in plan fiduciary net position   2,519,050   76,661,027   12,309,017   1,122,566   2,532,75   12,609,017   1,122,566   2,532,75   12,609,017   1,122,566   2,532,75   12,609,017   1,122,566   2,532,75   12,609,017   1,122,566   2,532,75   12,609,017   1,122,566   2,532,75   12,609,017   1,122,566   2,532,75   12,609,017   1,122,566   2,532,75   1,209,017   1,122,566   2,532,75   1,209,017   1,122,566   2,532,75   1,209,017   1,122,566   2,532,75   1,209,017	Administrative expense	, ,			, ,	(11,815)
Plan fiduciary net position - beginning   78,730,004   86,391,031   74,082,014   72,959,448   70,426,699   72,959,448   70,426,699   74,082,014   72,959,448   70,426,699   74,082,014   72,959,448   72,959,448   72,959,448   72,959,448   72,959,448   72,959,448   72,959,448   73,959,448	Other					(1,120)
Plan fiduciary net position - ending (b)   \$81,249,054   \$78,730,004   \$86,391,031   \$74,082,014   \$72,959,44     TSERS's net pension liability - ending (a) - (b)   \$16,671,983   \$14,842,238   \$4,682,601   \$12,081,997   \$10,366,95     Plan fiduciary net position as a percentage of the total pension liability   \$82,97%   \$84,14%   \$94,86%   \$85,98%   \$87,56     Covered payroll   \$82,97%   \$84,080   \$16,087,185   \$15,844,834   \$15,582,96     Not pension liability as a percentage of covered payroll   \$95,48%   \$88,02%   \$29,16%   \$76,25%   \$66,53     Local Governmental Employees'   \$917,160   \$904,200   \$876,765   \$841,148   \$798,12     Interest		2,519,050	(7,661,027)	12,309,017	1,122,566	2,532,750
Plan fiduciary net position as a percentage of the total pension liability - ending (a) - (b)   \$16.671.983   \$14.842.238   \$4.682.601   \$12.081.997   \$10.366.95   \$10.366.	,					70,426,698
Plan fiduciary net position as a percentage of the total pension liability   82.97%   84.14%   94.86%   85.98%   87.56						
Pension liability   82.97%   84.14%   94.86%   85.98%   87.56	TSERS's net pension liability - ending (a) - (b)	\$ 16,671,983	\$ 14,842,238	\$ 4,682,601	<u>\$ 12,081,997</u>	\$ 10,366,957
Net pension liability as a percentage of covered payroll   95.48%   88.02%   29.16%   76.25%   66.53	Plan fiduciary net position as a percentage of the total					
Net pension liability as a percentage of covered payroll   95.48%   88.02%   29.16%   76.25%   66.53						87.56%
Percentage of covered payroll   95.48%   88.02%   29.16%   76.25%   66.53	· ·	\$ 17,462,008	\$ 16,861,697	\$ 16,057,185	\$ 15,844,834	\$ 15,582,963
Service Cost   \$917,160   \$904,200   \$876,765   \$841,148   \$798,12	Net pension liability as a percentage of covered payroll	95.48%	88.02%	29.16%	76.25%	66.53%
Service Cost	Local Governmental Employees'					
Service Cost	Total pension liability					
Changes of benefit terms Differences between expected and actual experience Changes of assumptions Benefit payments, including refunds of member contributions Net change in total pension liability - beginning Total pension liability - beginning Total pension liability - ending (a)  Contributions-employer Contributions-employer Contributions-employer Contributions-employer Contributions-member Selenefit payments, including refunds of member contributions Selenefit payments, including refunds of member contributions Contributions-employer Contributions-employer Contributions-member Selenefit payments, including refunds of member contributions Benefit payments, including refunds of member contributions Benefit payments, including refunds of member contributions Chapter Selenefit payments, including refunds of member contributions Chapter Selenefit payments, including refunds of member contributions Administrative expense (6,407) Chapter Selenefit payments, including refunds of member contributions (1,865,415) (1,732,564) (1,630,148) (1,551,217) (1,472,854) (1,630,148) (1,551,217) (1,472,854) (1,630,148) (1,551,217) (1,472,854) (1,630,148) (1,551,217) (1,472,854) (1,630,148) (1,551,217) (1,472,854) (1,630,148) (1,551,217) (1,472,854) (1,630,148) (1,551,217) (1,472,854) (1,630,148) (1,551,217) (1,472,854) (1,851,410) (1,8	Service Cost	\$ 917,160	\$ 904,200	\$ 876,765	\$ 841,148	\$ 798,120
Differences between expected and actual experience Changes of assumptions		2,312,550		2,139,954	2,037,306	1,934,144
Changes of assumptions Benefit payments, including refunds of member contributions Net change in total pension liability  Total pension liability - beginning  35,578,561  34,180,463  31,372,060  29,866,869  28,354,60  Total pension liability - ending (a)  Total pension liability - ending (a)  \$37,828,184  \$35,578,561  \$34,180,463  \$31,372,060  \$29,866,869  \$28,354,60  Total pension liability - ending (a)  \$37,828,184  \$35,578,561  \$34,180,463  \$31,372,060  \$29,866,869  \$29,866,869  \$28,354,60  \$31,372,060  \$29,866,869  \$29,866,869  Plan fiduciary net position  Cher Change in plan fiduciary net position  1,267,964  Plan fiduciary net position - beginning  29,937,133  29,937,133  32,646,867  27,798,634  27,798,634  27,135,947  25,982,26  Plan fiduciary net position as a percentage of the total pension liability  82,49%  84,14%  95,51%  88,61%  90,86	<u>v</u>	- 885 328		- 296.054	- 177 954	- 252 859
Net change in total pension liability         2,249,623         1,398,098         2,808,403         1,505,191         1,512,26           Total pension liability - beginning         35,578,561         34,180,463         31,372,060         29,866,869         28,354,60           Total pension liability - ending (a)         \$ 37,828,184         \$ 35,578,561         \$ 34,180,463         \$ 31,372,060         \$ 29,866,869         28,354,60           Plan fiduciary net position         Contributions-employer         \$ 1,050,570         \$ 880,449         \$ 745,308         \$ 640,969         \$ 534,10           Contributions-member         524,830         477,001         453,112         436,754         420,43           Net investment income         1,561,729         (2,331,589)         5,283,300         1,139,009         1,675,33           Benefit payments, including refunds of member contributions         (1,865,415)         (1,732,564)         (1,630,148)         (1,551,217)         (1,472,85           Administrative expense         (6,407)         (5,415)         (5,295)         (4,889)         (4,63           Other         2,657         2,384         1,956         2,061         1,30           Net change in plan fiduciary net position - beginning         29,937,133         32,646,867         27,798,634         27,135,	Changes of assumptions	-	(01,770)	,	-	-
Total pension liability - beginning 35,578,561 34,180,463 31,372,060 29,866,869 28,354,60  Total pension liability - ending (a) \$37,828,184 \$35,578,561 \$34,180,463 \$31,372,060 \$29,866,869  Plan fiduciary net position  Contributions-member \$1,050,570 \$880,449 \$745,308 \$640,969 \$534,10 Contributions-member \$24,830 \$477,001 \$453,112 \$436,754 \$420,43 \$1,581,729 \$2,331,589 \$5,283,300 \$1,139,009 \$1,675,33 \$80,449 \$1,285,415 \$1,123,2864 \$1,285,415 \$1,285	Benefit payments, including refunds of member contributions				(1,551,217)	(1,472,856)
Total pension liability - ending (a) \$37,828,184 \$35,578,561 \$34,180,463 \$31,372,060 \$29,866,86 Plan fiduciary net position  Contributions-employer \$1,050,570 \$880,449 \$745,308 \$640,969 \$534,10 \$24,830 \$477,001 \$453,112 \$436,754 \$420,43 \$451,729 \$(2,331,589) \$5,283,300 \$1,139,009 \$1,675,33 \$40,000 \$40,000 \$40	Net change in total pension liability	2,249,623	1,398,098	2,808,403	1,505,191	1,512,267
Plan fiduciary net position   Contributions-employer   \$1,050,570 \$880,449 \$745,308 \$640,969 \$534,10	Total pension liability - beginning	35,578,561	34,180,463	31,372,060	29,866,869	28,354,602
Contributions-employer \$1,050,570 \$880,449 \$745,308 \$640,969 \$534,10   Contributions-member \$524,830 \$477,001 \$453,112 \$436,754 \$420,43   Net investment income \$1,561,729 \$(2,331,589) \$5,283,300 \$1,139,009 \$1,675,33   Benefit payments, including refunds of member contributions (1,865,415) \$(1,732,564) \$(1,630,148) \$(1,551,217) \$(1,472,85   Administrative expense \$(6,407) \$(5,415) \$(5,295) \$(4,889) \$(4,63   Cher \$2,657\$ \$2,384 \$1,956 \$2,061 \$1,30   Net change in plan fiduciary net position \$1,267,964 \$(2,709,734) \$4,848,233 \$662,687 \$1,153,68   Plan fiduciary net position - beginning \$29,937,133 \$32,646,867 \$27,798,634 \$27,135,947 \$25,982,26   Plan fiduciary net position - ending (b) \$31,205,097 \$29,937,133 \$32,646,867 \$27,798,634 \$27,135,947 \$27,135,944   LGERS's net pension liability (asset) - ending (a) - (b) \$6,623,087 \$5,641,428 \$1,533,596 \$3,573,426 \$2,730,92   Plan fiduciary net position as a percentage of the total pension liability \$82,49% \$84.14% \$95.51% \$88.61% \$90.86    **Total Contributions and \$40,000   **Total Contributions	Total pension liability - ending (a)	\$ 37,828,184	\$ 35,578,561	\$ 34,180,463	\$ 31,372,060	\$ 29,866,869
Contributions-member	Plan fiduciary net position					
Net investment income Benefit payments, including refunds of member contributions Administrative expense (6,407) (5,415) (1,732,564) (1,630,148) (1,551,217) (1,472,85 (6,407) (5,415) (5,295) (4,889) (4,63 (6,407) (5,415) (5,295) (4,889) (4,63 (6,407) (5,415) (5,295) (4,889) (4,63 (6,407) (5,415) (5,295) (4,889) (4,63 (6,407) (5,415) (5,295) (4,889) (4,63 (6,407) (5,415) (5,295) (4,889) (4,63 (6,407) (5,415) (5,295) (4,889) (4,63 (6,407) (5,415) (5,295) (4,889) (4,63 (6,407) (5,415) (6,297) (4,889) (4,63 (6,407) (6,415) (6,415) (		, ,	, .		. ,	. ,
Benefit payments, including refunds of member contributions Administrative expense (6,407) (5,415) (5,295) (4,889) (4,63 (6,407) (5,415) (5,295) (4,889) (4,63 (6,407) (5,415) (5,295) (4,889) (4,63 (6,407) (						
Other         2,657         2,384         1,956         2,061         1,30           Net change in plan fiduciary net position         1,267,964         (2,709,734)         4,848,233         662,687         1,153,68           Plan fiduciary net position - beginning         29,937,133         32,646,867         27,798,634         27,135,947         25,982,26           Plan fiduciary net position - ending (b)         \$31,205,097         \$29,937,133         \$32,646,867         \$27,798,634         \$27,798,634         \$27,135,94           LGERS's net pension liability (asset) - ending (a) - (b)         \$6,623,087         \$5,641,428         \$1,533,596         \$3,573,426         \$2,730,92           Plan fiduciary net position as a percentage of the total pension liability         82.49%         84.14%         95.51%         88.61%         90.86	Benefit payments, including refunds of member contributions					(1,472,856)
Net change in plan fiduciary net position         1,267,964         (2,709,734)         4,848,233         662,687         1,153,68           Plan fiduciary net position - beginning         29,937,133         32,646,867         27,798,634         27,135,947         25,982,26           Plan fiduciary net position - ending (b)         \$31,205,097         \$29,937,133         \$32,646,867         \$27,798,634         \$27,798,634         \$27,135,94           LGERS's net pension liability (asset) - ending (a) - (b)         \$6,623,087         \$5,641,428         \$1,533,596         \$3,573,426         \$2,730,92           Plan fiduciary net position as a percentage of the total pension liability         82.49%         84.14%         95.51%         88.61%         90.86	·					(4,634)
Plan fiduciary net position - beginning         29,937,133         32,646,867         27,798,634         27,135,947         25,982,26           Plan fiduciary net position - ending (b)         \$31,205,097         \$29,937,133         \$32,646,867         \$27,798,634         \$27,798,634         \$27,135,947           LGERS's net pension liability (asset) - ending (a) - (b)         \$6,623,087         \$5,641,428         \$1,533,596         \$3,573,426         \$2,730,92           Plan fiduciary net position as a percentage of the total pension liability         82.49%         84.14%         95.51%         88.61%         90.86						1,302
Plan fiduciary net position - ending (b)       \$ 31,205,097       \$ 29,937,133       \$ 32,646,867       \$ 27,798,634       \$ 27,135,94         LGERS's net pension liability (asset) - ending (a) - (b)       \$ 6,623,087       \$ 5,641,428       \$ 1,533,596       \$ 3,573,426       \$ 2,730,92         Plan fiduciary net position as a percentage of the total pension liability       82.49%       84.14%       95.51%       88.61%       90.86	• •				,	
LGERS's net pension liability (asset) - ending (a) - (b) \$ 6,623,087 \$ 5,641,428 \$ 1,533,596 \$ 3,573,426 \$ 2,730,92  Plan fiduciary net position as a percentage of the total pension liability 82.49% 84.14% 95.51% 88.61% 90.86						25,982,260
Plan fiduciary net position as a percentage of the total pension liability 82.49% 84.14% 95.51% 88.61% 90.86	Plan fiduciary net position - ending (b)	\$ 31,205,097		\$ 32,646,867	\$ 27,798,634	\$ 27,135,947
pension liability 82.49% 84.14% 95.51% 88.61% 90.86	LGERS's net pension liability (asset) - ending (a) - (b)	\$ 6,623,087	\$ 5,641,428	\$ 1,533,596	\$ 3,573,426	\$ 2,730,922
•	Plan fiduciary net position as a percentage of the total	00.400/	04.4401	05 5401	00.0464	00.0001
Covered powell	•					90.86%
	Covered payroll	φ 0,4/9,1//	φ 1,510,499	φ 1,100,423	Ф 0,914,444	\$ 6,665,378
	Net pension liability (asset) as a percentage of covered payroll	78.11%	74.52%	21.40%	51.68%	40.97%

2018		2017	2016		2015		2014
2010		2017		_	2010	-	2014
\$ 1,630,	323	\$ 1,469,395	\$ 1,580,544	\$	1,562,846	\$	1,556,027
5,281,0	004	5,195,104	4,937,464		4,803,766		4,648,995
44,		449,563	35,605		- (070 470)		355,224
815,9 1,637,1		229,339	(190,178) 1,743,836		(278,170)		(345,392)
(4,666,		381,934 (4,545,296)	(4,339,637)		(4,184,410)		(3,989,397)
4,742,8	<u> </u>	3,180,039	3,767,634	_	1,904,032		2,225,457
75,639,9	901	72,459,862	68,692,228		66,788,196		64,562,739
\$ 80,382,		\$ 75,639,901	\$ 72,459,862	\$	68,692,228	\$	66,788,196
<del>+ 50,002,</del>			,	-	,,	Ť	,,
\$ 1,602,9	201	\$ 1,441,194	\$ 1,275,003	\$	1,262,988	\$	1,177,341
910,		894,538	864,151	Ψ	854,306	Ψ	825,548
4,885,		6,656,652	472,174		1,468,624		9,121,005
(4,666,3	391)	(4,545,296)	(4,339,637)		(4,184,410)		(3,989,397)
(11,6		(11,265)	(10,217)		(10,646)		(10,762)
	181	808	325	_	393	_	320
2,721,2	238	4,436,631	(1,738,201)		(608,745)		7,124,055
67,705,4		63,268,829	65,007,030	_	65,615,775		58,491,720
\$ 70,426,6	698	\$ 67,705,460	\$ 63,268,829	\$	65,007,030	\$	65,615,775
\$ 9,956,0	089	\$ 7,934,441	\$ 9,191,033	\$	3,685,198	\$	1,172,421
87 6	51%	89.51%	87.32%		94.64%		98.24%
				¢		Ф	
\$ 14,869,2	∠ I ∠	\$ 14,440,822	\$ 13,934,459	\$	13,803,148	\$	13,548,227
66.0	D60/-	E4 040/	6E 060/		26 700/		0 650/
	96%	54.94%	65.96%		26.70%		8.65%
\$ 713,2	227	\$ 656,231	\$ 684,288	\$	670,936	\$	654,735
1,838,9	989	1,803,590	1,707,699		1,628,373		1,555,958
		-	12,581		65,914		(7,790)
378,0		73,083	50,205		(72,177)		(80,590)
595, (1,402,1		138,096 (1,322,277)	183,019 (1,251,918)		- (1,172,578)		- (1,106,799)
2,123,8		1,348,723	1,385,874	_	1,120,468		1,015,514
					, ,		
26,230,		24,882,010	23,496,136	_	22,375,668	_	21,360,154
\$ 28,354,6	502	\$ 26,230,733	\$ 24,882,010	\$	23,496,136	\$	22,375,668
\$ 492,3		\$ 461,329	n 444400	\$	408,694	\$	413,175
			\$ 414,168	Ψ			
401,0		391,459	375,572	Ψ	363,863		346,961
1,789,	337	391,459 2,413,758	375,572 175,189	Ψ	520,578		3,161,964
1,789,3 (1,402,7	337 793)	391,459 2,413,758 (1,322,277)	375,572 175,189 (1,251,918)	Ψ	520,578 (1,172,578)		3,161,964 (1,106,799)
1,789,3 (1,402,7 (4,3	337 793) 324)	391,459 2,413,758 (1,322,277) (4,264)	375,572 175,189 (1,251,918) (3,926)	Ψ	520,578 (1,172,578) (4,086)		3,161,964 (1,106,799) (3,974)
1,789,3 (1,402,7 (4,3	337 793) 324) 081	391,459 2,413,758 (1,322,277)	375,572 175,189 (1,251,918)	_	520,578 (1,172,578)		3,161,964 (1,106,799)
1,789,; (1,402,; (4,; 3,0 1,279,;	337 793) 324) 081 250	391,459 2,413,758 (1,322,277) (4,264) 3,330 1,943,335	375,572 175,189 (1,251,918) (3,926) 3,248 (287,667)	_	520,578 (1,172,578) (4,086) 3,285 119,756		3,161,964 (1,106,799) (3,974) 3,297 2,814,624
1,789,; (1,402,; (4,5, 3,; 1,279,; 24,703,	337 793) 324) 081 250	391,459 2,413,758 (1,322,277) (4,264) 3,330 1,943,335 22,759,675	375,572 175,189 (1,251,918) (3,926) 3,248 (287,667) 23,047,342	_	520,578 (1,172,578) (4,086) 3,285 119,756 22,927,586		3,161,964 (1,106,799) (3,974) 3,297 2,814,624 20,112,962
1,789,; (1,402,; (4,; 3,0 1,279,;	337 793) 324) 081 250	391,459 2,413,758 (1,322,277) (4,264) 3,330 1,943,335	375,572 175,189 (1,251,918) (3,926) 3,248 (287,667)	\$   	520,578 (1,172,578) (4,086) 3,285 119,756	\$	3,161,964 (1,106,799) (3,974) 3,297 2,814,624
1,789,; (1,402,; (4,5, 3,; 1,279,; 24,703,	337 793) 324) 081 250 010 260	391,459 2,413,758 (1,322,277) (4,264) 3,330 1,943,335 22,759,675	375,572 175,189 (1,251,918) (3,926) 3,248 (287,667) 23,047,342	_	520,578 (1,172,578) (4,086) 3,285 119,756 22,927,586	\$	3,161,964 (1,106,799) (3,974) 3,297 2,814,624 20,112,962
1,789,; (1,402,7 (4,5 3,6 1,279,2 24,703,1 \$ 25,982,2	337 793) 324) 081 250 010 260	391,459 2,413,758 (1,322,277) (4,264) 3,330 1,943,335 22,759,675 \$ 24,703,010	375,572 175,189 (1,251,918) (3,926) 3,248 (287,667) 23,047,342 \$ 22,759,675	\$	520,578 (1,172,578) (4,086) 3,285 119,756 22,927,586 23,047,342	\$ \$	3,161,964 (1,106,799) (3,974) 3,297 2,814,624 20,112,962 22,927,586
1,789,; (1,402,; (4,; 3,; 1,279,; 24,703,; \$ 25,982,; \$ 2,372,;	337 793) 324) 081 250 010 260	391,459 2,413,758 (1,322,277) (4,264) 3,330 1,943,335 22,759,675 \$ 24,703,010	375,572 175,189 (1,251,918) (3,926) 3,248 (287,667) 23,047,342 \$ 22,759,675	\$	520,578 (1,172,578) (4,086) 3,285 119,756 22,927,586 23,047,342	\$ \$	3,161,964 (1,106,799) (3,974) 3,297 2,814,624 20,112,962 22,927,586
1,789,; (1,402,7 (4,5) 3,1 1,279,; 24,703,0 \$ 25,982,; \$ 2,372,5	337 793) 324) 081 250 010 260 342	391,459 2,413,758 (1,322,277) (4,264) 3,330 1,943,335 22,759,675 \$ 24,703,010 \$ 1,527,723	375,572 175,189 (1,251,918) (3,926) 3,248 (287,667) 23,047,342 \$ 22,759,675 \$ 2,122,335	\$ \$	520,578 (1,172,578) (4,086) 3,285 119,756 22,927,586 23,047,342 448,794		3,161,964 (1,106,799) (3,974) 3,297 2,814,624 20,112,962 22,927,586 (551,918)
1,789,; (1,402,; (4,; 3,; 1,279,; 24,703,; \$ 25,982,; \$ 2,372,;	337 793) 324) 081 250 010 260 342	391,459 2,413,758 (1,322,277) (4,264) 3,330 1,943,335 22,759,675 \$ 24,703,010 \$ 1,527,723	375,572 175,189 (1,251,918) (3,926) 3,248 (287,667) 23,047,342 \$ 22,759,675 \$ 2,122,335	\$ \$	520,578 (1,172,578) (4,086) 3,285 119,756 22,927,586 23,047,342 448,794	\$ \$ \$	3,161,964 (1,106,799) (3,974) 3,297 2,814,624 20,112,962 22,927,586 (551,918)
1,789,; (1,402,7 (4,5) 3,1 1,279,; 24,703,6 \$ 25,982,; \$ 2,372,; 91.6 \$ 6,368,5	337 793) 324) 081 250 010 260 342	391,459 2,413,758 (1,322,277) (4,264) 3,330 1,943,335 22,759,675 \$ 24,703,010 \$ 1,527,723	375,572 175,189 (1,251,918) (3,926) 3,248 (287,667) 23,047,342 \$ 22,759,675 \$ 2,122,335	\$ \$	520,578 (1,172,578) (4,086) 3,285 119,756 22,927,586 23,047,342 448,794		3,161,964 (1,106,799) (3,974) 3,297 2,814,624 20,112,962 22,927,586 (551,918)

## REQUIRED SUPPLEMENTARY INFORMATION SCHEDULE OF CHANGES IN THE NET PENSION LIABILITY AND RELATED RATIOS COST-SHARING, MULTIPLE-EMPLOYER, DEFINED BENEFIT PENSION PLANS

Last Ten Fiscal Years

(Dollars in Thousands)									
		2023		2022		2021		2020	2019
Firefighters' and Rescue Squad Workers'									
Total pension liability									
Service Cost	\$	7,357	\$	7,262	\$	7,675	\$	7,733	\$ 7,640
Interest Changes of benefit terms		32,031		32,013		33,116 -		32,500	32,140 -
Differences between expected and actual experience		(3,381)		(8,484)		(4,881)		(1,376)	(4,922)
Changes of assumptions		-		-		6,525		-	-
Benefit payments, including refunds of member contributions  Net change in total pension liability	_	(30,876) 5,131	_	(30,369)		(30,147) 12,288		(29,953) 8,904	<u>(29,502)</u> 5,356
• •		,				,		,	
Total pension liability - beginning	\$	500,618	<u>-</u>	500,196	<u>_</u>	487,908	_	479,004	473,648 \$ 470,004
Total pension liability - ending (a)	Φ	505,749	\$	500,618	\$	500,196	\$	487,908	\$ 479,004
Plan fiduciary net position Contributions-member	\$	2,471	\$	2,318	\$	2,569	\$	2,581	\$ 2,770
Contributions-member Contributions-nonemployer	Ф	19,702	Φ	19,352	Ф	19,002	Ф	18,652	18,302
Net investment income		25,008		(37,515)		85,952		18,593	27,363
Benefit payments, including refunds of member contributions		(30,876)		(30,369)		(30,147)		(29,953)	(29,502)
Administrative expense		(844)		(975)		(987)		(885)	(1,002)
Other  Net change in plan fiduciary net position	_	23 15,484	_	18 (47,171)	_	15 76,404	_	9,002	<u>(18)</u> 17,913
•		•		, ,				,	
Plan fiduciary net position - beginning	<u>-</u>	480,956		528,127	<u></u>	451,723	ф.	442,721	424,808 \$442,724
Plan fiduciary net position - ending (b)	<u>\$</u>	496,440	\$	480,956	\$	528,127	<u>\$</u>	451,723	\$ 442,721
FRSWPF's net pension liability (asset) - ending (a) - (b)	<u>\$</u>	9,309	<u>\$</u>	19,662	\$	(27,931)	\$	36,185	\$ 36,283
Plan fiduciary net position as a percentage of the total									
pension liability		98.16%		96.07%		105.58%		92.58%	92.43%
Covered payroll		N/A		N/A		N/A		N/A	N/A
Net pension liability as a		<b>N</b> 1/A		<b>N1/A</b>		<b>N</b> 1/A		<b>N</b> 1/A	N1/A
percentage of covered payroll		N/A		N/A		N/A		N/A	N/A
Registers of Deeds'									
Total pension liability									
Service Cost	\$	1,151	\$	1,107	\$	1,120	\$	1,125	\$ 1,117
Interest Differences between expected and actual experience		1,025 (618)		1,025 (360)		1,134 308		1,122 (124)	1,133
Changes of assumptions		(010)		(300)		2,101		(124)	(770) -
Benefit payments, including refunds of member contributions		(1,850)		(1,844)		(1,802)		(1,788)	(1,754)
Net change in total pension liability		(292)		(72)		2,861		335	(274)
Total pension liability - beginning	_	33,918	_	33,990	_	31,129	_	30,794	31,068
Total pension liability - ending (a)	\$	33,626	\$	33,918	\$	33,990	\$	31,129	\$ 30,794
Plan fiduciary net position									
Contributions-employer	\$	892	\$	1,146	\$	1,200	\$	958	\$ 950
Net investment income		(537)		(5,334)		(228)		4,353	3,721
Benefit payments, including refunds of member contributions		(1,850)		(1,844)		(1,802)		(1,788)	(1,754)
Administrative expense  Net change in plan fiduciary net position	_	(20)	_	(13) (6,045)	_	(14) (844)	_	(12) 3,511	<u>(12)</u> 2,905
						, ,			
Plan fiduciary net position - beginning	\$	47,158 45,643	<u>_</u>	53,203 47,158	¢	54,047 53,203	<u></u>	50,536 54,047	47,631 \$ 50,536
Plan fiduciary net position - ending (b)	<u>Ф</u>		<u>\$</u>	41,100	\$	33,203	\$	J4,U4 <i>1</i>	
RODSPF's net pension asset - ending (a) - (b)	\$	(12,017)	\$	(13,240)	\$	(19,213)	\$	(22,918)	\$ (19,742)
Plan fiduciary net position as a percentage of the total									
pension liability		135.74%		139.04%		156.53%		173.62%	164.11%
Covered payroll		N/A		N/A		N/A		N/A	N/A
Net pension asset as a									
percentage of covered payroll		N/A		N/A		N/A		N/A	N/A

	2018	_	2017	_	2016	2015	2014
\$	7,542 31,686	\$	4,841 31,475	\$	5,610 30,035 118	\$ 5,884 29,671	\$ 5,710 29,394 8,770
	(121) 10,593 (31,727)		2,048 2,549 (29,070)		(2,177) 15,577 (27,998)	(2,799) - (26,912)	2,714 (16,688) (25,614)
	17,973		11,843		21,165 422,667	5,844 416,823	4,286 412,537
\$	455,675 473,648	\$	443,832 455,675	\$	443,832	\$ 422,667	\$ 416,823
=	· · ·	=	<del></del>	=			-
\$	2,790 17,952 29,505 (31,727) (885) 10	\$	2,594 17,602 39,928 (29,070) (919) 15	\$	2,778 13,900 2,867 (27,998) (860) 18	\$ 2,822 13,900 8,711 (26,912) (1,622) 4	\$ 2,781 14,627 53,842 (25,614) (1,045) 2
	17,645		30,150		(9,295)	(3,097)	44,593
_	407,163	_	377,013	_	386,308	389,405	344,812
<u>\$</u>	424,808	\$	407,163	\$	377,013	\$ 386,308	\$ 389,405
<u>\$</u>	48,840	<u>\$</u>	48,512	\$	66,819	\$ 36,359	\$ 27,418
	89.69%		89.35%		84.94%	91.40%	93.42%
	N/A		N/A		N/A	N/A	N/A
	N1/A		NI/A		N1/A	N1/A	N1/A
	N/A		N/A		N/A	N/A	N/A
\$	1,086			_	F70	ф <i>E</i> 70	Φ 500
φ		\$	860	\$	579	\$ 578	\$ 563
Ψ	1,157	\$	1,164	\$	1,354	1,372	1,342
Ψ	1,157 (1,125) -	\$	1,164 440 -	\$	1,354 (45) 7,082	1,372 (558) -	1,342 302 -
Ψ	1,157 (1,125) - (1,793)	\$ 	1,164 440	\$ 	1,354 (45) 7,082 (1,718)	1,372 (558) - (1,715)	1,342 302
Ψ 	1,157 (1,125) - (1,793) (675)	\$ 	1,164 440 - (1,793) 671	\$ 	1,354 (45) 7,082 (1,718) 7,252	1,372 (558) - (1,715) (323)	1,342 302 - (1,666) 541
\$ 	1,157 (1,125) - (1,793)	\$ 	1,164 440 - (1,793)	\$ 	1,354 (45) 7,082 (1,718)	1,372 (558) - (1,715)	1,342 302 - (1,666)
_	1,157 (1,125) - (1,793) (675) 31,743		1,164 440 - (1,793) 671 31,072 31,743		1,354 (45) 7,082 (1,718) 7,252 23,820	1,372 (558) - (1,715) (323) 24,143	1,342 302 - (1,666) 541 23,602
_	1,157 (1,125) - (1,793) (675) 31,743 31,068		1,164 440 - (1,793) 671 31,072 31,743		1,354 (45) 7,082 (1,718) 7,252 23,820 31,072	1,372 (558) - (1,715) (323) 24,143 \$ 23,820 \$ 802	1,342 302 - (1,666) 541 23,602 \$ 24,143 \$ 817
\$	1,157 (1,125) - (1,793) (675) 31,743 31,068	\$	1,164 440 - (1,793) 671 31,072 31,743 869 (13)	\$	1,354 (45) 7,082 (1,718) 7,252 23,820 31,072 817 3,722	1,372 (558) - (1,715) (323) 24,143 \$ 23,820 \$ 802 1,114	1,342 302 - (1,666) 541 23,602 \$ 24,143 \$ 817 2,714
\$	1,157 (1,125) - (1,793) (675) 31,743 31,068 856 (230) (1,793) (14)	\$	1,164 440 - (1,793) 671 31,072 31,743 869 (13) (1,793) (19)	\$	1,354 (45) 7,082 (1,718) 7,252 23,820 31,072 817 3,722 (1,718) (47)	1,372 (558) - (1,715) (323) 24,143 \$ 23,820 \$ 802 1,114 (1,715) (16)	1,342 302 - (1,666) 541 23,602 \$ 24,143 \$ 817 2,714 (1,666) (18)
\$	1,157 (1,125) - (1,793) (675) 31,743 31,068 856 (230) (1,793) (14) (1,181)	\$	1,164 440 - (1,793) 671 31,072 31,743 869 (13) (1,793) (19) (956)	\$	1,354 (45) 7,082 (1,718) 7,252 23,820 31,072 817 3,722 (1,718) (47) 2,774	1,372 (558) - (1,715) (323) 24,143 \$ 23,820 \$ 802 1,114 (1,715) (16) 185	1,342 302 - (1,666) 541 23,602 \$ 24,143 \$ 817 2,714 (1,666) (18) 1,847
\$	1,157 (1,125) - (1,793) (675) 31,743 31,068 856 (230) (1,793) (14) (1,181) 48,812	\$	1,164 440 - (1,793) 671 31,072 31,743 869 (13) (1,793) (19) (956) 49,768	\$ \$	1,354 (45) 7,082 (1,718) 7,252 23,820 31,072 817 3,722 (1,718) (47) 2,774 46,994	1,372 (558) - (1,715) (323) 24,143 \$ 23,820 \$ 802 1,114 (1,715) (16) 185 46,809	1,342 302 - (1,666) 541 23,602 \$ 24,143 \$ 817 2,714 (1,666) (18) 1,847 44,962
\$ \$	1,157 (1,125) (1,793) (675) 31,743 31,068 856 (230) (1,793) (14) (1,181) 48,812 47,631	\$ \$	1,164 440 - (1,793) 671 31,072 31,743 869 (13) (1,793) (19) (956) 49,768 48,812	\$ \$	1,354 (45) 7,082 (1,718) 7,252 23,820 31,072 817 3,722 (1,718) (47) 2,774 46,994 49,768	1,372 (558) - (1,715) (323) 24,143 \$ 23,820 \$ 802 1,114 (1,715) (16) 185 46,809 \$ 46,994	1,342 302 - (1,666) 541 23,602 \$ 24,143 \$ 817 2,714 (1,666) (18) 1,847 44,962 \$ 46,809
\$	1,157 (1,125) - (1,793) (675) 31,743 31,068 856 (230) (1,793) (14) (1,181) 48,812	\$	1,164 440 - (1,793) 671 31,072 31,743 869 (13) (1,793) (19) (956) 49,768	\$ \$	1,354 (45) 7,082 (1,718) 7,252 23,820 31,072 817 3,722 (1,718) (47) 2,774 46,994	1,372 (558) - (1,715) (323) 24,143 \$ 23,820 \$ 802 1,114 (1,715) (16) 185 46,809	1,342 302 - (1,666) 541 23,602 \$ 24,143 \$ 817 2,714 (1,666) (18) 1,847 44,962
\$ \$	1,157 (1,125) - (1,793) (675) 31,743 31,068 856 (230) (1,793) (14) (1,181) 48,812 47,631 (16,563)	\$ \$	1,164 440 - (1,793) 671 31,072 31,743 869 (13) (1,793) (19) (956) 49,768 48,812 (17,069)	\$ \$	1,354 (45) 7,082 (1,718) 7,252 23,820 31,072 817 3,722 (1,718) (47) 2,774 46,994 49,768 (18,696)	1,372 (558) - (1,715) (323) 24,143 \$ 23,820 \$ 802 1,114 (1,715) (16) 185 46,809 \$ 46,994 \$ (23,174)	1,342 302 - (1,666) 541 23,602 \$ 24,143 \$ 817 2,714 (1,666) (18) 1,847 44,962 \$ 46,809 \$ (22,666)
\$ \$	1,157 (1,125) (1,793) (675) 31,743 31,068 856 (230) (1,793) (14) (1,181) 48,812 47,631 (16,563)	\$ \$	1,164 440 - (1,793) 671 31,072 31,743 869 (13) (1,793) (19) (956) 49,768 48,812 (17,069)	\$ \$	1,354 (45) 7,082 (1,718) 7,252 23,820 31,072 817 3,722 (1,718) (47) 2,774 46,994 49,768 (18,696)	1,372 (558) - (1,715) (323) 24,143 \$ 23,820 \$ 802 1,114 (1,715) (16) 185 46,809 \$ 46,994 \$ (23,174)	1,342 302 - (1,666) 541 23,602 \$ 24,143 \$ 817 2,714 (1,666) (18) 1,847 44,962 \$ 46,809 \$ (22,666)
\$ \$	1,157 (1,125) - (1,793) (675) 31,743 31,068 856 (230) (1,793) (14) (1,181) 48,812 47,631 (16,563)	\$ \$	1,164 440 - (1,793) 671 31,072 31,743 869 (13) (1,793) (19) (956) 49,768 48,812 (17,069)	\$ \$	1,354 (45) 7,082 (1,718) 7,252 23,820 31,072 817 3,722 (1,718) (47) 2,774 46,994 49,768 (18,696)	1,372 (558) - (1,715) (323) 24,143 \$ 23,820 \$ 802 1,114 (1,715) (16) 185 46,809 \$ 46,994 \$ (23,174)	1,342 302 - (1,666) 541 23,602 \$ 24,143 \$ 817 2,714 (1,666) (18) 1,847 44,962 \$ 46,809 \$ (22,666)

### REQUIRED SUPPLEMENTARY INFORMATION SCHEDULE OF CHANGES IN THE NET PENSION LIABILITY AND RELATED RATIOS SINGLE-EMPLOYER, DEFINED BENEFIT PENSION PLANS

Last Ten Fiscal Years

Last Ten Fiscal Years										
Dollars in Thousands)		2023		2022		2021		2020		2019
onsolidated Judicial										
otal pension liability ervice Cost erest langes of benefit terms	\$	15,796 53,741 2,197	\$	14,320 51,397 2,127	\$	19,545 49,700 -	\$	18,869 48,149 -	\$	18,710 46,838 -
erences between expected and actual experience anges of assumptions		29,934		22,417		2,451 46,622		4,583		845
nefit payments, including refunds of member contributions t change in total pension liability	_	(57,587) 44,081	_	(53,819) 36,442	_	(50,001) 68,317		(48,920) 22,681	_	(46,451) 19,942
tal pension liability - beginning tal pension liability - ending (a)	\$	839,335 883,416	\$	802,893 839,335	\$	734,576 802,893	\$	711,895 734,576	\$	691,953 711,895
an fiduciary net position ontributions-employer ontributions-member	\$	34,952 6,103	\$	33,428 5,470	\$	29,259 5,585	\$	26,637 5,224	\$	25,636 5,151
et investment income enefit payments, including refunds of member contributions dministrative expense ther		34,201 (57,587) (71)		(51,610) (53,819) (29) 4		118,772 (50,001) (34)		25,923 (48,920) (27)		38,211 (46,451) (30) (119)
let change in plan fiduciary net position		17,598		(66,556)	_	103,581		8,837	_	22,398
lan fiduciary net position - beginning	<u> </u>	664,764	_	731,320	<u>_</u>	627,739	<u></u>	618,902	<u>-</u>	596,504
lan fiduciary net position - ending (b)	\$	682,362 201,054	\$ \$	174 571	\$ \$	731,320	\$\$ \$	627,739 106,837	\$ \$	618,902 92,993
JRS's net pension liability - ending (a) - (b)	Φ	201,004	<u>Ф</u>	174,571	<u>Ф</u>	71,573	φ	100,031	Ψ	52,993
lan fiduciary net position as a percentage of the total ension liability		77.24%		79.20%		91.09%		85.46%		86.94%
overed payroll	\$	87,489	\$	83,528	\$	80,294	\$	79,277	\$	75,712
et pension liability as a proentage of covered payroll		229.80%		209.00%		89.14%		134.76%		122.82%
gislative										
tal pension liability rvice Cost	\$	797	\$	796	\$	1,034	\$	1,058	\$	1,088
terest nanges of benefit terms		1,933 94		1,925 94		2,053 -		2,051 -		2,052
fferences between expected and actual experience nanges of assumptions		(92)		(281) -		(815) (353)		(617) -		(596) -
enefit payments, including refunds of member contributions et change in total pension liability	_	(2,449) 283		(2,358) 176		(2,516) (597)		(2,388) 104	_	(2,732) (188)
otal pension liability - beginning	_	30,150	_	29,974	_	30,571	_	30,467	_	30,655
otal pension liability - ending (a)	\$	30,433	<u>\$</u>	30,150	<u>\$</u>	29,974	\$	30,571	\$	30,467
an fiduciary net position ontributions-employer ontributions-member	\$	901 259	\$	1,029 253	\$	987 253	\$	956 253	\$	809 257
let investment income enefit payments, including refunds of member contributions		1,441 (2,449)		(2,183) (2,358)		5,162 (2,516)		1,151 (2,388)		1,726 (2,732)
dministrative expense		(23)		(15)		(13)		(13)		(14)
ther et change in plan fiduciary net position	_	(1) 128	_	(3,275)	_	3,873	_	(35)	_	(50)
in fiduciary net position - beginning	_	28,620		31,895		28,022	_	28,057		28,061
n fiduciary net position - ending (b)	\$	28,748	\$	28,620	\$	31,895	\$	28,022	\$	28,057
S's net pension liability (asset) - ending (a) - (b)	\$	1,685	\$	1,530	\$	(1,921)	\$	2,549	\$	2,410
lan fiduciary net position as a percentage of the total ension liability		94.46%		94.93%		106.41%		91.66%		92.09%
overed payroll	\$	3,617	\$	3,619	\$	3,615	\$	3,613	\$	3,611
et pension liability (asset) as a ercentage of covered payroll		46.59%		42.28%		(53.14%)		70.55%		66.74%

	2018		2017		2016	_	2015	_	2014
\$	17,192	\$	15,630	\$	16,904	\$	16,812	\$	16,637
	45,397		44,837		42,009		40,846		39,405
	430		4,349		332		-		3,031
	7,660		2,193		(4,295)		(2,289)		(2,484)
	12,836		3,032		26,588		-		-
	(43,392)	_	(42,053)		(40,462)	_	(38,364)	_	(35,428)
	40,123		27,988		41,076		17,005		21,161
\$	651,830	<u>_</u>	623,842 651,830	\$	582,766	\$	565,761	\$	544,600
Φ	691,953	<u>\$</u>	031,030	Φ	623,842	Φ	582,766	<u>Ф</u>	565,761
\$	23,988	\$	19,592	\$	18,908	\$	18,949	\$	21,390
Ψ.	5,706	Ψ.	7,399	*	7,561	~	6,238	Ψ.	5,598
	41,123		55,762		3,972		12,176		74,294
	(43,392)		(42,053)		(40,462)		(38,364)		(35,428)
	(24)		(37)		(73)		(30)		(48)
	- 27.404	_	40.663		(10.004)	_	(1.020)	_	3
	27,401		40,663		(10,094)		(1,030)		65,809
\$	569,103 596,504	\$	528,440 569,103	\$	538,534 528,440	\$	539,564 538,534	\$	473,755 539,564
<del>≚</del> \$	95,449	<u>*</u> \$	82,727	\$	95,402	<u>*</u> \$	44,232	<u></u> \$	26,197
<u>Ψ</u>	30,443	Ψ	02,727	Ψ	30,402	<u> </u>	77,202	Ψ	20,107
	86.21%		87.31%		84.71%		92.41%		95.37%
\$	77,255	\$	66,504	\$	69,489	\$	69,638	\$	76,367
	100 ==0/		101.000/		107.000/		00 500/		0.4.000/
	123.55%		124.39%		137.29%		63.52%		34.30%
\$	1,006	\$	872	\$	822	\$	844	\$	747
	2,028	٠	2,056	·	1,708	•	1,742	·	1,678
	24		215		22		·		146
	207		(122)		(520)		(579)		762
	511		`121 <sup>′</sup>		5,151		` <b>-</b> ´		-
	(2,531)	_	(2,437)		(2,430)		(2,473)	_	(2,614)
	1,245		705		4,753		(466)		719
	29,410	_	28,705	_	23,952	_	24,418	_	23,699
\$	30,655	\$	29,410	\$	28,705	\$	23,952	<u>\$</u>	24,418
\$	689	\$	675	\$	65	\$	_	\$	_
Ψ.	253	Ψ.	253	*	253	•	253	٠	253
	1,975		2,744		181		642		4,293
	(2,531)		(2,437)		(2,430)		(2,473)		(2,614)
	(14)		(18)		(53)		(17)		(37)
	372	_	1,217	_	(1,984)	_	(1,595)	_	1,895
	27,689		26,472		28,456		30,051		28,156
\$	28,061	\$	27,689	\$	26,472	\$	28,456	\$	30,051
\$	2,594	\$	1,721	\$	2,233	\$	(4,504)	\$	(5,633)
		-							
	91.54%		94.15%		92.22%		118.80%		123.07%
\$	3,618	\$	3,705	\$	3,616	\$	3,611	\$	3,608
	71.70%		46.45%		61.75%		(124.73%)		(156.13%)

## REQUIRED SUPPLEMENTARY INFORMATION SCHEDULE OF CHANGES IN THE NET PENSION LIABILITY AND RELATED RATIOS SINGLE-EMPLOYER, DEFINED BENEFIT PENSION PLANS

Last Ten Fiscal Years
(Dollars in Thousands)

(Dollars in Thousands)										
		2023		2022		2021		2020		2019
North Carolina National Guard										
Total pension liability										
Service Cost	\$	230	\$	196	\$	276	\$	315	\$	327
Interest		9,478		11,070		11,097		11,746		12,368
Changes of benefit terms		- (0.070)		- (00.704)		4.500		- (40.004)		- (40.704)
Differences between expected and actual experience Changes of assumptions		(6,970)		(26,734)		4,599 4,601		(12,364)		(12,701)
Benefit payments, including refunds of member contributions		(9,080)		(9,049)		(8,915)		(9,018)		(8,736)
Net change in total pension liability	_	(6,342)	_	(24,517)	_	11,658	_	(9,321)	_	(8,742)
Total pension liability - beginning		150,054		174,571		162,913		172,234		180,976
Total pension liability - ending (a)	<u>e</u>	143,712	<u></u>	150,054	\$	174,571	\$	162,913	\$	172,234
Total pension hability - ending (a)	Ψ_	145,712	Ψ_	130,034	Ψ_	174,371	Ψ	102,313	Ψ	172,234
Plan fiduciary net position							_		_	
Contributions-nonemployer	\$	11,032	\$	11,032	\$	11,032	\$	11,032	\$	9,072
Net investment income		8,539		(12,272)		27,365		5,871		8,463
Benefit payments, including refunds of member contributions Administrative expense		(9,080) (144)		(9,049) (91)		(8,915) (94)		(9,018) (83)		(8,736) (13)
Other		(174)		(4)		1		1		(16)
Net change in plan fiduciary net position	_	10,346	_	(10,384)	_	29,389	_	7,803	_	8,770
Plan fiduciary net position - beginning		165,381		175,765		146,376		138,573		129,803
Plan fiduciary net position - ending (b)	\$	175,727	\$	165,381	\$	175,765	\$	146,376	\$	138,573
NGPF's net pension liability (asset) - ending (a) - (b)	\$	(32,015)	\$	(15,327)	\$	(1,194)	\$	16,537	\$	33,661
Plan fiduciary net position as a percentage of the total pension liability		122.28%		110.21%		100.68%		89.85%		80.46%
Covered payroll		N/A		N/A		N/A		N/A		N/A
Net pension liability as a percentage of covered payroll		N/A		N/A		N/A		N/A		N/A

 2018	_	2017	2016	2015	 2014
\$ 304 12,288 - (1,748) 3,926 (8,766) 6,004	\$	305 11,975 - 1,204 955 (8,677) 5,762	\$ 593 10,700 - 30 15,149 (8,512) 17,960	\$ 550 9,916 8,734 (198) - (7,958) 11,044	\$ 512 9,330 5,752 192 - (7,502) 8,284
\$ 174,972 180,976	\$	169,210 174,972	\$ 151,250 169,210	\$ 140,206 151,250	\$ 131,922
\$ 8,923 8,766 (8,766) (249) 2	\$	8,517 11,626 (8,677) (168)	\$ 7,066 842 (8,512) (97) 1	\$ 6,039 2,493 (7,958) (75)	\$ 7,007 14,942 (7,502) (73) 1
\$ 8,676 121,127 129,803	\$	11,298 109,829 121,127	\$ (700) 110,529 109,829	\$ 499 110,030 110,529	\$ 14,375 95,655 110,030
\$ 51,173	\$	53,845	\$ 59,381	\$ 40,721	\$ 30,176
71.72% N/A		69.23% N/A	64.91% N/A	73.08% N/A	78.48% N/A
N/A		N/A	N/A	N/A	N/A

#### REQUIRED SUPPLEMENTARY INFORMATION SCHEDULE OF EMPLOYER AND NONEMPLOYER CONTRIBUTIONS COST-SHARING, MULTIPLE-EMPLOYER, DEFINED BENEFIT PENSION PLANS

Last Ten Fiscal Years

(Dollars in Thousands)

Teachers' and State Employees'		2023		2022		2021		2020		2019
Actuarially determined contribution	\$	3,034,897	\$	2,761,946	\$	2,373,252	\$	2,055,075	\$	1,915,146
Contributions in relation to the actuarially determined contribution (1)		3,034,897		2,761,946		2,373,252		2,055,075		1,915,146
Contribution excess	\$	-	\$	-	\$	-	\$	-	\$	-
Covered payroll	\$	17,462,008	\$	16,861,697	\$	16,057,185	\$	15,844,834	\$	15,582,963
Contributions as a percentage of covered payroll		17.38%		16.38%		14.78%		12.97%		12.29%
Local Governmental Employees'										
Actuarially determined contribution	\$	1,024,690	\$	886,620	\$	763,653	\$	625,511	\$	512,287
Contributions in relation to the actuarially determined contribution (1)		1,050,570		880,449		745,308		640,969		534,107
Contribution deficiency (excess)	\$	(25,880)	\$	6,171	\$	18,345	\$	(15,458)	\$	(21,820)
Covered payroll	\$	8,479,177	\$	7,570,499	\$	7,166,423	\$	6,914,444	\$	6,665,378
Contributions as a percentage of covered payroll		12.39%		11.63%		10.40%		9.27%		8.01%
Firefighters' and Rescue Squad Workers' (2)										
Actuarially determined contribution	\$	13,087	\$	15,183	\$	14,846	\$	14,324	\$	14,544
Contributions in relation to the actuarially determined contribution (1)		19,702		19,352		19,002		18,652		18,302
Contribution deficiency (excess)	\$	(6,615)	\$	(4,169)	\$	(4,156)	\$	(4,328)	\$	(3,758)
Covered payroll		N/A								
Contributions as a percentage of covered payroll		N/A								
Registers of Deeds'										
Actuarially determined contribution  Contributions in relation to the	\$	-	\$	-	\$	-	\$	-	\$	-
actuarially determined contribution (1)	_	892	_	1,146	_	1,200	_	958	_	950
Contribution excess	\$	(892)	\$	(1,146)	\$	(1,200)	\$	(958)	\$	(950)
Covered payroll		N/A								
Contributions as a percentage of covered payroll		N/A								

<sup>(1)</sup> Contributions in relation to the actuarially determined contribution are the same as the contractually required contribution (CRC). The CRC was the same as the actuarially determined contribution except in years where there is a deficiency (excess).

Note: Changes in benefit terms, methods and assumptions are presented in Notes to the Required Supplementary Information (RSI) schedules following the pension RSI tables.

<sup>(2)</sup> Nonemployer contributing entity

_	2018	_	2017	_	2016	_	2015	_	2014
\$	1,565,728	\$	1,438,306	\$	1,210,904	\$	1,262,988	\$	1,177,341
	1,602,901		1,441,194		1,275,003		1,262,988		1,177,341
\$	(37,173)	\$	(2,888)	\$	(64,099)	\$	-	\$	-
\$	14,869,212	\$	14,440,822	\$	13,934,459	\$	13,803,148	\$	13,548,227
	10.78%		9.98%		9.15%		9.15%		8.69%
\$	483,559	\$	453,193	\$	393,920	\$	402,429	\$	397,462
	492,317		461,329		414,168		408,694		413,175
\$	(8,758)	\$	(8,136)	\$	(20,248)	\$	(6,265)	\$	(15,713)
\$	6,368,275	\$	6,192,808	\$	5,860,574	\$	5,650,694	\$	5,553,383
	7.73%		7.45%		7.07%		7.23%		7.44%
\$	14,287	\$	17,705	\$	13,241	\$	13,900	\$	14,620
	17,952		17,602		13,900		13,900		14,627
\$	(3,665)	\$	103	\$	(659)	\$	-	\$	(7)
	N/A								
	N/A								
\$	-	\$	-	\$	-	\$	-	\$	-
	856		869		817		802		817
\$	(856)	\$	(869)	\$	(817)	\$	(802)	\$	(817)
	N/A								
	N/A								

#### REQUIRED SUPPLEMENTARY INFORMATION SCHEDULE OF EMPLOYER AND NONEMPLOYER CONTRIBUTIONS SINGLE-EMPLOYER, DEFINED BENEFIT PENSION PLANS

Last Ten Fiscal Years

(Dollars in Thousands)

Consolidated Judicial		2023	2022	 2021	 2020	 2019
Actuarially determined contribution	\$	34,689	\$ 33,428	\$ 29,259	\$ 26,637	\$ 24,947
Contributions in relation to the actuarially determined contribution		34,952	33,428	29,259	26,637	25,636
Contribution excess	\$	(263)	\$ -	\$ _	\$ -	\$ (689)
Covered payroll	\$	87,489	\$ 83,528	\$ 80,294	\$ 79,277	\$ 75,712
Contributions as a percentage of covered payroll		39.95%	40.02%	36.44%	33.60%	33.86%
Legislative						
Actuarially determined contribution	\$	890	\$ 1,029	\$ 987	\$ 956	\$ 809
Contributions in relation to the actuarially determined contribution		901	1,029	987	956	809
Contribution excess	\$	(11)	\$ -	\$ 	\$ -	\$ 
Covered payroll	\$	3,617	\$ 3,619	\$ 3,615	\$ 3,613	\$ 3,611
Contributions as a percentage of covered payroll		24.91%	28.43%	27.30%	26.46%	22.40%
North Carolina National Guard *	,					
Actuarially determined contribution	\$	11,032	\$ 11,032	\$ 11,032	\$ 11,032	\$ 9,072
Contributions in relation to the actuarially determined contribution		11,032	11,032	11,032	11,032	9,072
Contribution excess	\$	-	\$ -	\$ 	\$ -	\$ 
Covered payroll		N/A	N/A	N/A	N/A	N/A
Contributions as a percentage of covered payroll		N/A	N/A	N/A	N/A	N/A

<sup>\*</sup> Nonemployer contributing entity

Note: Changes in benefit terms, methods and assumptions are presented in Notes to the Required Supplementary Information (RSI) schedules following the pension RSI tables.

2018	 2017	2016	 2015	 2014
\$ 23,988	\$ 19,592	\$ 18,324	\$ 18,949	\$ 21,390
23,988	19,592	18,908	18,949	21,390
\$ -	\$ 	\$ (584)	\$ -	\$ 
\$ 77,255	\$ 66,504	\$ 69,489	\$ 69,638	\$ 76,367
31.05%	29.46%	27.21%	27.21%	28.01%
\$ 689	\$ 675	\$ 65	\$ -	\$ -
689	675	65	-	-
\$ -	\$ -	\$ -	\$ -	\$ -
\$ 3,618	\$ 3,705	\$ 3,616	\$ 3,611	\$ 3,608
19.04%	18.22%	1.80%	0.00%	0.00%
\$ 8,923	\$ 8,517	\$ 7,066	\$ 6,039	\$ 5,349
8,923	8,517	7,066	6,039	7,007
\$ -	\$ -	\$ -	\$ -	\$ (1,658)
N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A

# REQUIRED SUPPLEMENTARY INFORMATION SCHEDULE OF INVESTMENT RETURNS ALL DEFINED BENEFIT PENSION PLANS

Last Ten Fiscal Years

Annual money-weighted rate of return, net of investment expense	2023	2022	2021_	2020_	2019
Cost-Sharing, Multiple Employer					
Teachers' and State Employees'	5.27%	(7.18%)	19.13%	4.35%	6.57%
Local Governmental Employees'	5.27%	(7.20%)	19.10%	4.34%	6.58%
Firefighters' and Rescue Squad Workers'	5.25%	(7.15%)	19.10%	4.33%	6.55%
Registers of Deeds'	(1.16%)	(10.13%)	(0.43%)	8.72%	7.91%
Single-Employer					
Consolidated Judicial	5.25%	(7.17%)	19.13%	4.36%	6.57%
Legislative	5.19%	(7.00%)	18.81%	4.30%	6.43%
North Carolina National Guard	5.12%	(6.90%)	18.40%	4.28%	6.52%

2018	2017	2016	2015	2014	
7.61%	10.75%	0.74%	2.27%	15.88%	
7.59%	10.74%	0.77%	2.27%	15.86%	
7.59%	10.76%	0.75%	2.26%	15.62%	
(0.47%)	(0.03%)	8.04%	2.26%	6.04%	
7.60%	10.75%	0.75%	2.27%	15.87%	
7.64%	10.72%	0.66%	2.25%	15.91%	
7.44%	10.63%	0.77%	2.25%	15.63%	

### NOTES TO REQUIRED SUPPLEMENTARY INFORMATION SCHEDULE OF EMPLOYER CONTRIBUTIONS

For the Fiscal Year Ended June 30, 2023

Changes of benefit terms.										
		Cost	t of Living	Increase						
	<u>2022</u>	<u>2021</u>	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>
Cost-Sharing, Multiple-Employer Teachers' and State Employees'	N/A	N/A	N/A	N/A	N/A	1.00%	N/A	N/A	N/A	1.00%
Local Governmental Employees'	N/A	N/A	N/A	N/A	N/A	N/A	0.11%	0.63%	N/A	N/A
Firefighters' and Rescue Squad Workers'	N/A									
Registers of Deeds'	N/A									
Single-Employer Consolidated Judicial	N/A	N/A	N/A	N/A	N/A	1.00%	N/A	N/A	N/A	1.00%
Legislative	N/A	N/A	N/A	N/A	N/A	1.00%	N/A	N/A	N/A	1.00%
North Carolina National Guard (1)	N/A									

Beginning in FY 2015, with the implementation of GASB 68, the above table reflects COLA's in the period of the legislative session or Board of Trustees meeting when it was passed. The COLA is effective as of July 1 of that period and the fiscal year end plan liability is affected at June 30 of that year because the COLA is included in the actuarial assumptions used to calculate the plan NPL.

(1) In 2015, basic benefits were increased from \$95 to \$99 and total potential benefits were increased from \$190 to \$198. In 2016, basic benefits were increased from \$99 to \$105 and total benefits were increased from \$198 to \$210.

N/A - not applicable

Effective July 1, 2017, the definition of law enforcement officer related to TSERS members was changed by the General Assembly to include Probation/Parole officers for retirement benefit purposes. The change includes officers with respect to service rendered on or after July 1, 2017 and provides for unreduced retirement at age 55 with five years of service as a law enforcement officer or reduced retirement at age 50 with 15 years of service as a law enforcement officer.

Effective July 1, 2017, retirees and beneficiaries of deceased retirees receiving benefits from the TSERS, CJRS and LRS as of July 1, 2016 received a 1% cost-of-living adjustment. Retirees and beneficiaries of retirees with retirement effective dates between July 1, 2016 and before June 30, 2017 received a prorated amount. These benefit enhancements reflect legislation enacted by the North Carolina General Assembly.

In December 2021 for the fiscal year ended June 30, 2022, retirees and beneficiaries of deceased retirees receiving benefits from the TSERS, CJRS, and LRS as of September 1, 2021, received a one-time cost-of-living supplement payment, equal to 2% of the beneficiary's annual retirement allowance.

Benefit recipients of the TSERS, CJRS, and LRS received a one-time benefit supplement payment equal to 4% of the member's annual benefit amount, paid in October 2022, as granted by the North Carolina General Assembly for the fiscal year ended June 30, 2023. LGERS benefit recipients received a one-time benefit supplement payment equal to 2% of the member's annual benefit amount for the fiscal year ended June 30, 2023, paid in October 2022. The one-time supplements do not change the ongoing monthly benefits, and absent additional action by governing authorities, the payments will not recur in future years.

Benefit recipients of the TSERS, CJRS, and LRS will receive a one-time benefit supplement payment equal to 4% of the member's annual benefit amount, paid in November 2023, as granted by the North Carolina General Assembly for the fiscal year ended June 30, 2024. The one-time supplements do not change the ongoing monthly benefits, and absent additional action by governing authorities, the payments will not recur in future years.

### NOTES TO REQUIRED SUPPLEMENTARY INFORMATION SCHEDULE OF EMPLOYER CONTRIBUTIONS

For the Fiscal Year Ended June 30, 2023

Methods and assumptions used in calculations of actuarially determined contributions.

An actuarial valuation is performed for each plan each year. The actuarially determined contribution rates in the Schedule of Employer Contributions are calculated by the actuary as a projection of the required employer contribution for the fiscal year beginning 18 months following the date of the valuation results. See Note 12 for more information on the specific assumptions for each plan. The actuarially determined contributions for those items with covered payroll were determined using the actuarially

determined contribution rate from the actuary and covered payroll as adjusted for timing differences and other factors such as differences in employee class. Other actuarially determined contributions are disclosed in the schedule as expressed by the actuary in reports to the plans.

Changes of assumptions. In January 2021, the actuarial assumptions were updated to more closely reflect actual experience. These assumptions pertain to the Teachers' and State Employees' Retirement System, the Local Governmental Employees' Retirement System, the Firefighters' and Rescue Squad Workers' Pension Fund, the Registers of Deeds' Supplemental Pension Fund, the Consolidated Judicial Retirement System, the Legislative Retirement System and the North Carolina National Guard Pension Fund.

In 2020, the North Carolina Retirement Systems' consulting actuaries performed the quinquennial investigation of each retirement system's actual demographic and economic experience (known as the "Experience Review"). The Experience Review provides the basis for selecting the actuarial assumptions and methods used to determine plan liabilities and funding requirements. The most recent experience review examined each plan's experience during the period between January 1, 2015, and December 31, 2019. Based on the findings, the Boards of Trustees of the Teachers' and State Employees' Retirement System and the Local Governmental Employees' Retirement System adopted a number of new actuarial assumptions and methods. The most notable changes to the assumptions include updates to the mortality tables and mortality improvements. These assumptions were adjusted to be based on the Pub-2010 mortality tables reflecting the mortality projection scale MP-2019, released by the Society of Actuaries in 2019. In addition, the assumed rates of retirement, salary increases, and rates of termination from active employment were updated to more closely reflect actual experience.

The discount rate for Teachers' and State Employees' Retirement System, the Local Governmental Employees' Retirement System, the Firefighters' and Rescue Squad Workers' Pension Fund, the Consolidated Judicial Retirement System, the Legislative Retirement System and the North Carolina National Guard Pension Fund was lowered from 7.00% to 6.50%, and for the Register of Deeds' Supplemental Pension Fund from 3.75% to 3.00%, effective for the December 31, 2020 valuation, with the resulting effect on minimum actuarially determined employer contribution rates (or amounts) to be gradually recognized over a five-year period beginning July 1, 2022.