

## 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 Eight Fiscal Years
(Dollars in Thousands)

## Teachers' and State Employees' <br> Total pension liability

Service Cost
Interest
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
Total pension liability - beginning
Total pension liability - ending (a)
Plan fiduciary net position
Contributions-employer
Contributions-member
Net investment income
Benefit payments, including refunds of member contributions
Administrative expense
Other
Net change in plan fiduciary net position
Plan fiduciary net position - beginning
Plan fiduciary net position - ending (b)
TSERS's net pension liability - ending (a) - (b)
Plan fiduciary net position as a percentage of the total pension liability

Covered payroll
Net pension liability as a
percentage of covered payroll

| 2021 |  | 2020 |  | 2019 |  | 2018 |  | 2017 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$ | 1,906,954 | \$ | 1,851,058 | \$ | 1,782,475 | \$ | 1,630,323 |  | 1,469,395 |
|  | 5,857,546 |  | 5,663,045 |  | 5,460,427 |  | 5,281,004 |  | 5,195,104 |
|  | - |  | - |  | - |  | 44,339 |  | 449,563 |
|  | $(141,796)$ |  | 258,502 |  | 535,860 |  | 815,911 |  | 229,339 |
|  | 2,341,992 |  |  |  |  |  | 1,637,700 |  | 381,934 |
|  | $(5,055,075)$ |  | (4,934,999) |  | $(4,835,144)$ |  | $(4,666,391)$ |  | $(4,545,296)$ |
|  | 4,909,621 |  | 2,837,606 |  | 2,943,618 |  | 4,742,886 |  | 3,180,039 |
|  | 86,164,011 |  | 83,326,405 |  | 80,382,787 |  | 75,639,901 |  | 72,459,862 |
| \$ | 91,073,632 | \$ | 86,164,011 | \$ | 83,326,405 | \$ | 80,382,787 | \$ | 75,639,901 |
| \$ | 2,373,252 | \$ | 2,055,075 | \$ | 1,915,146 | \$ | 1,602,901 | \$ | 1,441,194 |
|  | 981,051 |  | 964,544 |  | 951,566 |  | 910,797 |  | 894,538 |
|  | 14,023,684 |  | 3,050,585 |  | 4,514,117 |  | 4,885,354 |  | 6,656,652 |
|  | $(5,055,075)$ |  | (4,934,999) |  | $(4,835,144)$ |  | $(4,666,391)$ |  | $(4,545,296)$ |
|  | $(13,870)$ |  | $(12,910)$ |  | $(11,815)$ |  | $(11,604)$ |  | $(11,265)$ |
|  | (25) |  | 271 |  | $(1,120)$ |  | 181 |  | 808 |
|  | 12,309,017 |  | 1,122,566 |  | 2,532,750 |  | 2,721,238 |  | 4,436,631 |
|  | 74,082,014 |  | 72,959,448 |  | 70,426,698 |  | 67,705,460 |  | 63,268,829 |
| \$ | 86,391,031 | \$ | 74,082,014 | \$ | 72,959,448 | \$ | 70,426,698 | \$ | 67,705,460 |
| \$ | 4,682,601 | \$ | 12,081,997 | \$ | 10,366,957 | \$ | 9,956,089 | \$ | 7,934,441 |
|  | 94.86\% |  | 85.98\% |  | 87.56\% |  | 87.61\% |  | 89.51\% |
| \$ | 16,057,185 | \$ | 15,844,834 | \$ | 15,582,963 | \$ | 14,869,212 | \$ | 14,440,822 |
|  | 29.16\% |  | 76.25\% |  | 66.53\% |  | 66.96\% |  | 54.94\% |

Local Governmental Employees'
Total pension liability
Service Cost
Interest
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
Total pension liability - beginning
Total pension liability - ending (a)
Plan fiduciary net position
Contributions-employer
Contributions-member
Net investment income
Benefit payments, including refunds of member contributions
Administrative expense
Other
Net change in plan fiduciary net position
Plan fiduciary net position - beginning
Plan fiduciary net position - ending (b)
LGERS's net pension liability (asset) - ending (a) - (b)
Plan fiduciary net position as a percentage of the total pension liability

Covered payroll
Net pension liability (asset) as a
percentage of covered payroll

$\left.\left.\begin{array}{rrrrrrr}95.51 \% & 88.61 \% & & 90.86 \% & & 91.63 \% & \\ \$ 7,166,423 & \$ & 6,914,444 & \$ & 6,665,378 & \$ & 6,368,275\end{array}\right) \$ 6,192,808\right)$

|  | 2016 |  | 2015 |  | 2014 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| \$ | 1,580,544 | \$ | 1,562,846 | \$ | 1,556,027 |
|  | 4,937,464 |  | 4,803,766 |  | 4,648,995 |
|  | 35,605 |  |  |  | 355,224 |
|  | $(190,178)$ |  | $(278,170)$ |  | $(345,392)$ |
|  | 1,743,836 |  |  |  |  |
|  | $(4,339,637)$ |  | $(4,184,410)$ |  | (3,989,397) |
|  | 3,767,634 |  | 1,904,032 |  | 2,225,457 |
|  | 68,692,228 |  | 66,788,196 |  | 64,562,739 |
| \$ | 72,459,862 |  | 68,692,228 | \$ | 66,788,196 |
| \$ | 1,275,003 | \$ | 1,262,988 | \$ | 1,177,341 |
|  | 864,151 |  | 854,306 |  | 825,548 |
|  | 472,174 |  | 1,468,624 |  | 9,121,005 |
|  | $(4,339,637)$ |  | $(4,184,410)$ |  | $(3,989,397)$ |
|  | $(10,217)$ |  | $(10,646)$ |  | $(10,762)$ |
|  | 325 |  | 393 |  | 320 |
|  | $(1,738,201)$ |  | $(608,745)$ |  | 7,124,055 |
|  | 65,007,030 |  | 65,615,775 |  | 58,491,720 |
| \$ | 63,268,829 |  | 65,007,030 | \$ | 65,615,775 |
| \$ | 9,191,033 | \$ | 3,685,198 | \$ | 1,172,421 |
|  | 87.32\% |  | 94.64\% |  | 98.24\% |
| \$ | 13,934,459 |  | 13,803,148 |  | 13,548,227 |
|  | 65.96\% |  | 26.70\% |  | 8.65\% |
| \$ | 684,288 | \$ | 670,936 | \$ | 654,735 |
|  | 1,707,699 |  | 1,628,373 |  | 1,555,958 |
|  | 12,581 |  | 65,914 |  | $(7,790)$ |
|  | 50,205 |  | $(72,177)$ |  | $(80,590)$ |
|  | $\begin{array}{r} 183,019 \end{array}$ |  |  |  |  |
|  | $\frac{(1,251,918)}{1,385,874}$ |  | $\frac{(1,172,578)}{1,120,468}$ |  | $\frac{(1,106,799)}{1,015,514}$ |
|  | 23,496,136 |  | 22,375,668 |  | 21,360,154 |
| \$ | 24,882,010 |  | 23,496,136 | \$ | 22,375,668 |
| \$ | 414,168 | \$ | 408,694 | \$ | 413,175 |
|  | 375,572 |  | 363,863 |  | 346,961 |
|  | 175,189 |  | 520,578 |  | 3,161,964 |
|  | $(1,251,918)$ |  | $(1,172,578)$ |  | $(1,106,799)$ |
|  | $(3,926)$ |  | $(4,086)$ |  | $(3,974)$ |
|  | 3,248 |  | 3,285 |  | 3,297 |
|  | $(287,667)$ |  | 119,756 |  | 2,814,624 |
|  | 23,047,342 |  | 22,927,586 |  | 20,112,962 |
| \$ | 22,759,675 | \$ | 23,047,342 | \$ | 22,927,586 |
| \$ | 2,122,335 | \$ | 448,794 | \$ | $(551,918)$ |
|  | 91.47\% |  | 98.09\% |  | 102.47\% |
| \$ | 5,860,574 | \$ | 5,650,694 | \$ | 5,553,383 |
|  | 36.21\% |  | 7.94\% |  | (9.94\%) |

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

Last Eight Fiscal Years
(Dollars in Thousands)

|  | 2021 |  | 2020 |  | 2019 |  | 2018 |  | 2017 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Firefighters' and Rescue Squad Workers' |  |  |  |  |  |  |  |  |  |  |
| Total pension liability |  |  |  |  |  |  |  |  |  |  |
| Service Cost | \$ | 7,675 | \$ | 7,733 | \$ | 7,640 | \$ | 7,542 | \$ | 4,841 |
| Interest |  | 33,116 |  | 32,500 |  | 32,140 |  | 31,686 |  | 31,475 |
| Changes of benefit terms |  | - |  | - |  | - |  | - |  | - |
| Differences between expected and actual experience |  | $(4,881)$ |  | $(1,376)$ |  | $(4,922)$ |  | (121) |  | 2,048 |
| Changes of assumptions |  | 6,525 |  | - |  |  |  | 10,593 |  | 2,549 |
| Benefit payments, including refunds of member contributions |  | $(30,147)$ |  | $(29,953)$ |  | $(29,502)$ |  | $(31,727)$ |  | $(29,070)$ |
| Net change in total pension liability |  | 12,288 |  | 8,904 |  | 5,356 |  | 17,973 |  | 11,843 |
| Total pension liability - beginning |  | 487,908 |  | 479,004 |  | 473,648 |  | 455,675 |  | 443,832 |
| Total pension liability - ending (a) | \$ | 500,196 | \$ | 487,908 | \$ | 479,004 | \$ | 473,648 | \$ | 455,675 |
| Plan fiduciary net position |  |  |  |  |  |  |  |  |  |  |
| Contributions-member | \$ | 2,569 | \$ | 2,581 | \$ | 2,770 | \$ | 2,790 | \$ | 2,594 |
| Contributions-nonemployer |  | 19,002 |  | 18,652 |  | 18,302 |  | 17,952 |  | 17,602 |
| Net investment income |  | 85,952 |  | 18,593 |  | 27,363 |  | 29,505 |  | 39,928 |
| Benefit payments, including refunds of member contributions |  | $(30,147)$ |  | $(29,953)$ |  | $(29,502)$ |  | $(31,727)$ |  | $(29,070)$ |
| Administrative expense |  | (987) |  | (885) |  | $(1,002)$ |  | (885) |  | (919) |
| Other |  | 15 |  | 14 |  | (18) |  | 10 |  | 15 |
| Net change in plan fiduciary net position |  | 76,404 |  | 9,002 |  | 17,913 |  | 17,645 |  | 30,150 |
| Plan fiduciary net position-beginning |  | 451,723 |  | 442,721 |  | 424,808 |  | 407,163 |  | 377,013 |
| Plan fiduciary net position - ending (b) | \$ | 528,127 | \$ | 451,723 | \$ | 442,721 | \$ | 424,808 | \$ | 407,163 |
| FRSWPF's's net pension liability (asset) - ending (a) - (b) | \$ | $\underline{(27,931)}$ | \$ | 36,185 | \$ | 36,283 | \$ | 48,840 | \$ | 48,512 |
| Plan fiduciary net position as a percentage of the total pension liability |  | 105.58\% |  | 92.58\% |  | 92.43\% |  | 89.69\% |  | 89.35\% |
| 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 |
| Registers of Deeds' |  |  |  |  |  |  |  |  |  |  |
| Total pension liability |  |  |  |  |  |  |  |  |  |  |
| Service Cost | \$ | 1,120 | \$ | 1,125 | \$ | 1,117 | \$ | 1,086 | \$ | 860 |
| Interest |  | 1,134 |  | 1,122 |  | 1,133 |  | 1,157 |  | 1,164 |
| Differences between expected and actual experience |  | 308 |  | (124) |  | (770) |  | $(1,125)$ |  | 440 |
| Changes of assumptions |  | 2,101 |  | - |  | - |  | - |  | - |
| Benefit payments, including refunds of member contributions |  | $(1,802)$ |  | $(1,788)$ |  | $(1,754)$ |  | $(1,793)$ |  | $(1,793)$ |
| Net change in total pension liability |  | 2,861 |  | 335 |  | (274) |  | (675) |  | 671 |
| Total pension liability - beginning |  | 31,129 |  | 30,794 |  | 31,068 |  | 31,743 |  | 31,072 |
| Total pension liability - ending (a) | \$ | 33,990 | \$ | 31,129 | \$ | 30,794 | \$ | 31,068 | \$ | 31,743 |
| Plan fiduciary net position |  |  |  |  |  |  |  |  |  |  |
| Contributions-employer | \$ | 1,200 | \$ | 958 | \$ | 950 | \$ | 856 | \$ | 869 |
| Net investment income |  | (228) |  | 4,353 |  | 3,721 |  | (230) |  | (13) |
| Benefit payments, including refunds of member contributions |  | $(1,802)$ |  | $(1,788)$ |  | $(1,754)$ |  | $(1,793)$ |  | $(1,793)$ |
| Administrative expense |  | (14) |  | (12) |  | (12) |  | (14) |  | (19) |
| Net change in plan fiduciary net position |  | (844) |  | 3,511 |  | 2,905 |  | $(1,181)$ |  | (956) |
| Plan fiduciary net position - beginning |  | 54,047 |  | 50,536 |  | 47,631 |  | 48,812 |  | 49,768 |
| Plan fiduciary net position - ending (b) | \$ | 53,203 | \$ | 54,047 | \$ | 50,536 | \$ | 47,631 | \$ | 48,812 |
| RODSPF's net pension asset - ending (a) - (b) | \$ | $(19,213)$ | \$ | $\underline{(22,918)}$ | \$ | $(19,742)$ | \$ | $(16,563)$ | \$ | $(17,069)$ |
| Plan fiduciary net position as a percentage of the total pension liability |  | 156.53\% |  | 173.62\% |  | 164.11\% |  | 153.31\% |  | 153.77\% |
| 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 |


|  |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |

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

Last Eight Fiscal Years
(Dollars in Thousands)

## Consolidated Judicial

Total pension liability
Service Cost
Interest
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
Total pension liability - beginning
Total pension liability - ending (a)
Plan fiduciary net position
Contributions-employer
Contributions-member
Net investment income
Benefit payments, including refunds of member contributions
Administrative expense
Other
Net change in plan fiduciary net position
Plan fiduciary net position - beginning
Plan fiduciary net position - ending (b)
CJRS's net pension liability - ending (a) - (b)
Plan fiduciary net position as a percentage of the total pension liability
Covered payroll
Net pension liability as a percentage of covered payroll

| 2021 |  | 2020 |  | 2019 |  | 2018 |  | 2017 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$ | 19,545 | \$ | 18,869 | \$ | 18,710 | \$ | 17,192 | \$ | 15,630 |
|  | 49,700 |  | 48,149 |  | 46,838 |  | 45,397 |  | 44,837 |
|  | - |  | - |  | - |  | 430 |  | 4,349 |
|  | 2,451 |  | 4,583 |  | 845 |  | 7,660 |  | 2,193 |
|  | 46,622 |  | - |  | - |  | 12,836 |  | 3,032 |
|  | $(50,001)$ |  | $(48,920)$ |  | $(46,451)$ |  | $(43,392)$ |  | $(42,053)$ |
|  | 68,317 |  | 22,681 |  | 19,942 |  | 40,123 |  | 27,988 |
|  | 734,576 |  | 711,895 |  | 691,953 |  | 651,830 |  | 623,842 |
| \$ | 802,893 | \$ | 734,576 | \$ | 711,895 | \$ | 691,953 | \$ | 651,830 |
| \$ | 29,259 | \$ | 26,637 | \$ | 25,636 | \$ | 23,988 | \$ | 19,592 |
|  | 5,585 |  | 5,224 |  | 5,151 |  | 5,706 |  | 7,399 |
|  | 118,772 |  | 25,923 |  | 38,211 |  | 41,123 |  | 55,762 |
|  | $(50,001)$ |  | $(48,920)$ |  | $(46,451)$ |  | $(43,392)$ |  | $(42,053)$ |
|  | (34) |  | (27) |  | (30) |  | (24) |  | (37) |
|  | - |  | - |  | (119) |  | - |  | - |
|  | 103,581 |  | 8,837 |  | 22,398 |  | 27,401 |  | 40,663 |
|  | 627,739 |  | 618,902 |  | 596,504 |  | 569,103 |  | 528,440 |
| \$ | 731,320 | \$ | 627,739 | \$ | 618,902 | \$ | 596,504 | \$ | 569,103 |
| \$ | 71,573 | \$ | 106,837 | \$ | 92,993 | \$ | 95,449 | \$ | 82,727 |
|  | 91.09\% |  | 85.46\% |  | 86.94\% |  | 86.21\% |  | 87.31\% |
| \$ | 80,294 | \$ | 79,277 | \$ | 75,712 | \$ | 77,255 | \$ | 66,504 |
|  | 89.14\% |  | 134.76\% |  | 122.82\% |  | 123.55\% |  | 124.39\% |

## Legislative

Total pension liability
Service Cost
Interest
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
Total pension liability - beginning
Total pension liability - ending (a)
Plan fiduciary net position
Contributions-employer
Contributions-member
Net investment income
Benefit payments, including refunds of member contributions
Administrative expense
Other
Net change in plan fiduciary net position
Plan fiduciary net position - beginning
Plan fiduciary net position - ending (b)
LRS's net pension liability (asset) - ending (a) - (b)
Plan fiduciary net position as a percentage of the total pension liability
Covered payroll
Net pension liability (asset) as a percentage of covered payroll

|  | 2016 |  | 2015 |  | 2014 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| \$ | 16,904 | \$ | 16,812 | \$ | 16,637 |
|  | 42,009 |  | 40,846 |  | 39,405 |
|  | 332 |  | - |  | 3,031 |
|  | $(4,295)$ |  | $(2,289)$ |  | $(2,484)$ |
|  | 26,588 |  | - |  | - |
|  | $(40,462)$ |  | $(38,364)$ |  | $(35,428)$ |
|  | 41,076 |  | 17,005 |  | 21,161 |
|  | 582,766 |  | 565,761 |  | 544,600 |
| \$ | 623,842 | \$ | 582,766 | \$ | 565,761 |
| \$ | 18,908 | \$ | 18,949 | \$ | 21,390 |
|  | 7,561 |  | 6,238 |  | 5,598 |
|  | 3,972 |  | 12,176 |  | 74,294 |
|  | $(40,462)$ |  | $(38,364)$ |  | $(35,428)$ |
|  | (73) |  | (30) |  | (48) |
|  | - |  | 1 |  | , |
|  | $(10,094)$ |  | $(1,030)$ |  | 65,809 |
|  | 538,534 |  | 539,564 |  | 473,755 |
| \$ | 528,440 | \$ | 538,534 | \$ | 539,564 |
| \$ | 95,402 | \$ | 44,232 | \$ | 26,197 |
|  | 84.71\% |  | 92.41\% |  | 95.37\% |
| \$ | 69,489 | \$ | 69,638 | \$ | 76,367 |
|  | 137.29\% |  | 63.52\% |  | 34.30\% |
| \$ | 822 | \$ | 844 | \$ | 747 |
|  | 1,708 |  | 1,742 |  | 1,678 |
|  | 22 |  | - |  | 146 |
|  | (520) |  | (579) |  | 762 |
|  | 5,151 |  | - |  | - |
|  | $(2,430)$ |  | $(2,473)$ |  | $(2,614)$ |
|  | 4,753 |  | (466) |  | 719 |
|  | 23,952 |  | 24,418 |  | 23,699 |
| \$ | 28,705 | \$ | 23,952 | \$ | 24,418 |
| \$ | 65 | \$ | - | \$ | - |
|  | 253 |  | 253 |  | 253 |
|  | 181 |  | 642 |  | 4,293 |
|  | $(2,430)$ |  | $(2,473)$ |  | $(2,614)$ |
|  | (53) |  | (17) |  | (37) |
|  | - |  | - |  | - |
|  | $(1,984)$ |  | $(1,595)$ |  | 1,895 |
|  | 28,456 |  | 30,051 |  | 28,156 |
| \$ | 26,472 | \$ | 28,456 | \$ | 30,051 |
| \$ | 2,233 | \$ | $(4,504)$ | \$ | $(5,633)$ |
|  | 92.22\% |  | 118.80\% |  | 123.07\% |
| \$ | 3,616 | \$ | 3,611 | \$ | 3,608 |
|  | 61.75\% |  | (124.73\%) |  | (156.13\%) |

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

Last Eight Fiscal Years
(Dollars in Thousands)


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' | 2021 |  | 2020 |  | 2019 |  | 2018 |  | 2017 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Actuarially determined contribution | \$ | 2,373,252 | \$ | 2,055,075 | \$ | 1,915,146 | \$ | 1,565,728 | \$ | 1,438,306 |
| Contributions in relation to the actuarially determined contribution (1) |  | 2,373,252 |  | 2,055,075 |  | 1,915,146 |  | 1,602,901 |  | 1,441,194 |
| Contribution deficiency (excess) | \$ | - | \$ | - | \$ | - | \$ | $(37,173)$ | \$ | $\stackrel{(2,888)}{ }$ |
| Covered payroll | \$ | 16,057,185 | \$ | 15,844,834 | \$ | 15,582,963 | \$ | 14,869,212 | \$ | 14,440,822 |
| Contributions as a percentage of covered payroll |  | 14.78\% |  | 12.97\% |  | 12.29\% |  | 10.78\% |  | 9.98\% |


| Local Governmental Employees' |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Actuarially determined contribution | \$ | 763,653 | \$ | 625,511 | \$ | 512,287 | \$ | 483,559 | \$ | 453,193 |
| Contributions in relation to the actuarially determined contribution (1) |  | 745,308 |  | 640,969 |  | 534,107 |  | 492,317 |  | 461,329 |
| Contribution excess | \$ | 18,345 | \$ | (15,458) | \$ | (21,820) | \$ | $(8,758)$ | \$ | $(8,136)$ |
| Covered payroll | \$ | 7,166,423 | \$ | 6,914,444 | \$ | 6,665,378 | \$ | 6,368,275 | \$ | 6,192,808 |
| Contributions as a percentage of covered payroll |  | 10.40\% |  | 9.27\% |  | 8.01\% |  | 7.73\% |  | 7.45\% |

## Firefighters' and Rescue Squad Workers' (2)

| Actuarially determined contribution | \$ | 14,846 | \$ | 14,324 | \$ | 14,544 | \$ | 14,287 | \$ | ,705 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Contributions in relation to the actuarially determined contribution (1) |  | 19,002 |  | 18,652 |  | 18,302 |  | 17,952 |  | ,602 |
| Contribution deficiency (excess) | \$ | $(4,156)$ | \$ | $(4,328)$ | \$ | $(3,758)$ | \$ | $(3,665)$ | \$ | 103 |
| Covered payroll |  | N/A |  | N/A |  | N/A |  | N/A |  |  |
| Contributions as a percentage of covered payroll |  | N/A |  | N/A |  | N/A |  | N/A |  |  |

## Registers of Deeds'

| Actuarially determined contribution | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Contributions in relation to the actuarially determined contribution (1) |  | 1,200 |  | 958 |  | 950 |  | 856 |  | 869 |
| Contribution excess | \$ | $(1,200)$ | \$ | (958) | \$ | (950) | \$ | (856) | \$ | (869) |
| Covered payroll |  | N/A |  | N/A |  | N/A |  | N/A |  |  |
| Contributions as a percentage of covered payroll |  | N/A |  | N/A |  | N/A |  | N/A |  |  |

(1) 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).
(2) 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.

|  | 2016 |  | 2015 |  | 2014 |  | 2013 |  | 2012 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$ | 1,210,904 | \$ | 1,262,988 | \$ | 1,177,341 | \$ | 1,078,783 | \$ | 1,015,762 |
|  | 1,275,003 |  | 1,262,988 |  | 1,177,341 |  | 1,120,482 |  | 1,015,762 |
| \$ | $(64,099)$ | \$ | - | \$ |  | \$ | $(41,699)$ | \$ | - |
| \$ | 13,934,459 | \$ | 13,803,148 | \$ | 13,548,227 | \$ | 13,451,164 | \$ | 13,652,715 |
|  | 9.15\% |  | 9.15\% |  | 8.69\% |  | 8.33\% |  | 7.44\% |
| \$ | 393,920 | \$ | 402,429 | \$ | 397,462 | \$ | 370,152 | \$ | 376,340 |
|  | 414,168 |  | 408,694 |  | 413,175 |  | 383,889 |  | 389,399 |
| \$ | $(20,248)$ | \$ | $(6,265)$ | \$ | $\underline{(15,713)}$ | \$ | $(13,737)$ | \$ | $(13,059)$ |
| \$ | 5,860,574 | \$ | 5,650,694 | \$ | 5,553,383 | \$ | 5,421,364 | \$ | 5,402,147 |
|  | 7.07\% |  | 7.23\% |  | 7.44\% |  | 7.08\% |  | 7.21\% |
| \$ | 13,241 | \$ | 13,900 | \$ | 14,620 | \$ | 14,074 | \$ | 14,389 |
|  | 13,900 |  | 13,900 |  | 14,627 |  | 15,447 |  | 14,398 |
| \$ | (659) | \$ | - | \$ | (7) | \$ | $(1,373)$ | \$ | (9) |
|  | N/A |  | N/A |  | N/A |  | N/A |  | N/A |
|  | N/A |  | N/A |  | N/A |  | N/A |  | N/A |
| \$ | - | \$ | - | \$ | - | \$ | - | \$ | - |
|  | 817 |  | 802 |  | 817 |  | 937 |  | 843 |
| \$ | (817) | \$ | (802) | \$ | (817) | \$ | (937) | \$ | $\stackrel{\text { (843) }}{ }$ |
| 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 EMPLOYER AND NONEMPLOYER CONTRIBUTIONS
SINGLE-EMPLOYER, DEFINED BENEFIT PENSION PLANS
Last Ten Fiscal Years
(Dollars in Thousands)
Consolidated Judicial
Actuarially determined contribution
Contributions in relation to the actuarially determined contribution

Contribution deficiency (excess)
Covered payroll
Contributions as a percentage of covered payroll

| 2021 |  | 2020 |  | 2019 |  | 2018 |  | 2017 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$ | 29,259 | \$ | 26,637 | \$ | 24,947 | \$ | 23,988 | \$ | 19,592 |
|  | 29,259 |  | 26,637 |  | 25,636 |  | 23,988 |  | 19,592 |
| \$ | - | \$ | - | \$ | (689) | \$ | - | \$ | - |
| \$ | 80,294 | \$ | 79,277 | \$ | 75,712 | \$ | 77,255 | \$ | 66,504 |
|  | 36.44\% |  | 33.60\% |  | 33.86\% |  | 31.05\% |  | 29.46\% |


| Legislative |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Actuarially determined contribution | \$ | 987 | \$ | 956 | \$ | 809 | \$ | 689 | \$ | 675 |
| Contributions in relation to the actuarially determined contribution |  | 987 |  | 956 |  | 809 |  | 689 |  | 675 |
| Contribution deficiency (excess) | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - |
| Covered payroll | \$ | 3,615 | \$ | 3,613 | \$ | 3,611 | \$ | 3,618 | \$ | 3,705 |
| Contributions as a percentage of covered payroll |  | 27.30\% |  | 26.46\% |  | 22.40\% |  | 19.04\% |  | 18.22\% |

## North Carolina National Guard *

Actuarially determined contribution
Contributions in relation to the actuarially determined contribution

Contribution excess
Covered payroll
Contributions as a percentage of covered payroll N/A N/A N/A N/A

[^0]|  | 2016 |  | 2015 |  | 2014 |  | 2013 |  | 2012 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$ | 18,324 | \$ | 18,949 | \$ | 21,390 | \$ | 18,992 | \$ | 18,956 |
|  | 18,908 |  | 18,949 |  | 21,390 |  | 18,992 |  | 18,956 |
| \$ | (584) | \$ | - | \$ | - | \$ | - | \$ | - |
| \$ | 69,489 | \$ | 69,638 | \$ | 76,367 | \$ | 71,533 | \$ | 75,673 |
|  | 27.21\% |  | 27.21\% |  | 28.01\% |  | 26.55\% |  | 25.05\% |
| \$ | 65 | \$ | - | \$ | - | \$ | - | \$ | - |
|  | 65 |  | - |  | - |  | - |  | - |
| \$ | - | \$ | - | \$ | - | \$ | - | \$ | - |
| \$ | 3,616 | \$ | 3,611 | \$ | 3,608 | \$ | 3,600 | \$ | 3,314 |
|  | 1.80\% |  | 0.00\% |  | 0.00\% |  | 0.00\% |  | 0.00\% |
| \$ | 7,066 | \$ | 6,039 | \$ | 5,349 | \$ | 5,667 | \$ | 6,075 |
|  | 7,066 |  | 6,039 |  | 7,007 |  | 7,007 |  | 7,007 |
| \$ | - | \$ | - | \$ | $(1,658)$ | \$ | $\underline{(1,340)}$ | \$ | (932) |
|  | 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 Eight Fiscal Years

## Annual money-weighted rate of return, net of investment expense <br> Cost-Sharing, Multiple Employer

Teachers' and
State Employees'

Local Governmental
Employees'
Firefighters' and Rescue
Squad Workers'

Registers of Deeds'
Single-Employer
Consolidated
Judicial

Legislative
North Carolina
National Guard

| 2021 | 2020 | 2019 | 2018 | 2017 |
| :---: | :---: | :---: | :---: | :---: |
| 19.13\% | 4.35\% | 6.57\% | 7.61\% | 10.75\% |
| 19.10\% | 4.34\% | 6.58\% | 7.59\% | 10.74\% |
| 19.10\% | 4.33\% | 6.55\% | 7.59\% | 10.76\% |
| (0.43\%) | 8.72\% | 7.91\% | (0.47\%) | (0.03\%) |
| 19.13\% | 4.36\% | 6.57\% | 7.60\% | 10.75\% |
| 18.81\% | 4.30\% | 6.43\% | 7.64\% | 10.72\% |
| 18.40\% | 4.28\% | 6.52\% | 7.44\% | 10.63\% |


| 2016 | 2015 | 2014 |
| :---: | :---: | :---: |
| 0.74\% | 2.27\% | 15.88\% |
| 0.77\% | 2.27\% | 15.86\% |
| 0.75\% | 2.26\% | 15.62\% |
| 8.04\% | 2.26\% | 6.04\% |
| 0.75\% | 2.27\% | 15.87\% |
| 0.66\% | 2.25\% | 15.91\% |
| 0.77\% | 2.25\% | 15.63\% |

## NOTES TO REQUIRED SUPPLEMENTARY INFORMATION <br> SCHEDULE OF EMPLOYER CONTRIBUTIONS

For the Fiscal Year Ended June 30, 2021
Changes of benefit terms.

| Cost of Living Increase |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\underline{2020}$ | $\underline{2019}$ | $\underline{2018}$ | $\underline{2017}$ | $\underline{2016}$ | $\underline{2015}$ | $\underline{2014}$ | $\underline{2013}$ | $\underline{2012}$ | $\underline{2011}$ |
| Cost-Sharing, Multiple-Employer |  |  |  |  |  |  |  |  |  |  |
| Teachers' and State Employees' | N/A | N/A | N/A | 1.00\% | N/A | N/A | N/A | 1.00\% | N/A | N/A |
| Local Governmental Employees' | N/A | N/A | N/A | N/A | 0.11\% | 0.63\% | N/A | N/A | N/A | N/A |
| Firefighters' and Rescue Squad Workers' | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Registers of Deeds' | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Single-Employer |  |  |  |  |  |  |  |  |  |  |
| Consolidated Judicial | N/A | N/A | N/A | 1.00\% | N/A | N/A | N/A | 1.00\% | N/A | N/A |
| Legislative | N/A | N/A | N/A | 1.00\% | N/A | N/A | N/A | 1.00\% | N/A | N/A |
| North Carolina <br> National Guard (1) | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 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.

## 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.

## NOTES TO REQUIRED SUPPLEMENTARY INFORMATION <br> SCHEDULE OF EMPLOYER CONTRIBUTIONS

For the Fiscal Year Ended June 30, 2021
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' 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.


[^0]:    * 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.

