NOTES TO THE FINANCIAL STATEMENTS

NOTE 12: RETIREMENT PLANS

The State reports nine retirement plans as pension trust funds, seven defined benefit public employee retirement plans administered by the State as well as two defined contribution plans, one of which is administered by the State and the other is overseen and administered by a third party under the auspices of the State. Although the assets of the plans directly administered by the State are commingled for investment purposes, each plan's assets may be used only for payment of benefits to the members of that plan and for the administrative costs in accordance with the terms of each plan. Eight of the pension plans held in trust in this note do not issue separate financial statements, and none of the plans are reported as part of other entities. The financial statements and other required disclosures are presented in Note 16 and in the *Required Supplementary Information (RSI)* section of this ACFR. The Supplemental Retirement Income Plan of North Carolina (NC 401(k) Plan) issues separately audited financial statements. Information on how to obtain the NC 401(k) Plan financial statements is found in Section B.10. The State also provides a defined benefit special separation allowance for eligible sworn law enforcement officers and a defined contribution optional retirement plan for university employees.

A. Summary of Significant Accounting Policies and Plan Asset Matters

The financial statements of these plans are prepared using the accrual basis of accounting. Plan member contributions are recognized in the period in which the contributions are due. Employer contributions are recognized when due and the employer has a legal requirement to provide the contributions. Benefits and refunds are recognized when due and payable in accordance with the terms of each plan.

Pursuant to North Carolina General Statutes, the State Treasurer is the custodian and administrator of the retirement systems. The State Treasurer maintains various investment portfolios in its External Investment Pool. The 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 participate in the Long-term Investment, Fixed Income Investment, Equity Investment, Real Estate Investment, Alternative Investment, Opportunistic Fixed Income Investment, and Inflation Sensitive Investment portfolios. The Fixed Income Asset Class includes the Long-term Investment and Fixed Income Investment portfolios. The Global Equity Asset Class includes the Equity Investment portfolio. The Registers of Deeds' Supplemental Pension Fund is invested in the Bond Index External Investment Pool.

The investment balance of each pension trust fund represents its share of the fair value of the net position of the various portfolios within the External Investment Pool. Additionally, the securities lending balance represents assets occurring from securities lending transactions that result from the systems' participation in the External Investment Pool. The investments of the State Treasurer are discussed in Note 3.

B. Plan Descriptions

Cost-Sharing, Multiple-Employer, Defined Benefit Plans

1. TEACHERS' AND STATE EMPLOYEES' RETIREMENT SYSTEM

Plan administration. The State of North Carolina administers the Teachers' and State Employees' Retirement System (TSERS) plan. This plan is a cost-sharing, multiple-employer, defined benefit pension plan established by the State to provide pension benefits for general employees and law enforcement officers (LEOs) of the State, general employees and LEOs of its component units, and employees of Local Education Agencies (LEAs) and charter schools not in the reporting entity. Membership is comprised of employees of the State (state agencies and institutions), universities, community colleges, and certain proprietary component units along with the LEAs and charter schools that elect to join the Retirement System. Benefit provisions are established by General Statute 135-5 and may be amended only by the North Carolina General Assembly. At June 30, 2023, the number of participating employers was as follows:

State of North Carolina	1
LEAs	116
Charter Schools	55
Community Colleges	58
University of North Carolina System	19
Other Component Units	5
	254

NOTES TO THE FINANCIAL STATEMENTS

Management of the plan is vested in the TSERS Board of Trustees, which consists of 13 members – eight appointed by the Governor, one appointed by the state Senate, one appointed by the state House of Representatives, and the State Treasurer, the State Superintendent and the Director of the Office of State Human Resources who serve as ex officio members.

Benefits provided. TSERS provides retirement and survivor benefits. Retirement benefits are determined as 1.82% of the member's average final compensation times the member's years of creditable service. A member's average final compensation is calculated as the average of a member's four highest consecutive years of compensation. General employee plan members are eligible to retire with unreduced retirement benefits at age 65 with five years of membership service, at age 60 with 25 years of creditable service, or at any age with 30 years of creditable service. General employee plan members are eligible to retire with reduced retirement benefits at age 50 with 20 years of creditable service or at age 60 with five years of membership service. Survivor benefits are available to eligible beneficiaries of general members who die while in active service or within 180 days of their last day of service and who also have either completed 20 years of creditable service regardless of age or have completed five years of service and have reached age 60. Eligible beneficiaries may elect to receive a monthly Survivor's Alternate Benefit for life in lieu of the return of the member's contributions that is generally available to beneficiaries of deceased members. The plan does not provide for automatic post-retirement benefit increases.

TSERS plan members who are LEOs are eligible to retire with unreduced retirement benefits at age 55 with five years of creditable service as an officer, or at any age with 30 years of creditable service. LEO plan members are eligible to retire with reduced retirement benefits at age 50 with 15 years of creditable service as an officer. LEOs who complete 25 years of creditable service with 15 years as an officer are eligible to retire with reduced retirement benefits. Survivor benefits are available to eligible beneficiaries of LEO members who die while in active service or within 180 days of their last day of service and who also have either completed 20 years of creditable service (not including sick leave) regardless of age, or have completed 15 years of creditable service as an LEO and have reached age 50, or have completed five years of creditable service as an LEO and have reached age 55, or have completed 15 years of creditable service as an LEO if killed in the line of duty. Eligible beneficiaries may elect to receive a monthly Survivor's Alternate Benefit for life in lieu of the return of the member's contributions that is generally available to beneficiaries of deceased members.

Contributions. Contribution provisions are established by General Statute 135-8 and may be amended only by the North Carolina General Assembly. Plan members are required to contribute 6% of their annual pay. The contribution rate for employers is set each year by the North Carolina General Assembly in the Appropriations Act and may not be less than the contribution rate required of plan members. The Board of Trustees establishes a funding policy from which an accrued liability rate and a normal contribution rate are developed by the consulting actuary. The sum of those two rates developed under the funding policy is the actuarially determined contribution rate (ADC). The Board of Trustees may further adopt a contribution rate policy that is higher than the ADC known as the required employer contribution to be recommended to the General Assembly. The State's and other participating employers' contractually required contribution rate for the year ended June 30, 2023 was 17.38% of covered payroll. This was equal to the actuarially determined contribution. The actuarially determined contribution included 1.24% of covered payroll to satisfy the cost of the one-time cost of living supplement for retirees enacted through Section 39.20.(a) of Session Law 2022-74 and paid in October 2022. This amount, combined with plan member contributions and investment income, funds the benefits earned by plan members during the year, a payment to reduce the net pension liability and administrative expenses. Actual contributions are reported in Section F of this note.

Refunds of contributions. Members who have terminated service as contributing members, may file an application for a refund of their contributions. By state law, refunds to members include interest (currently 4% per year) regardless of the number of years of retirement service credit or of the reason for separation from service. State law requires a 60 day waiting period after service termination before the refund may be paid. The acceptance of a refund payment cancels the individual's right to any other retirement or survivor benefit provided by TSERS.

2. LOCAL GOVERNMENTAL EMPLOYEES' RETIREMENT SYSTEM

Plan administration. The State of North Carolina administers the Local Governmental Employees' Retirement System (LGERS) plan. This plan is a cost-sharing, multiple-employer, defined benefit pension plan established by the State to provide benefits for employees of local governments. Membership is comprised of general employees, local law enforcement officers of participating local governmental entities, firefighters and rescue squad workers. Benefit provisions are established by General Statute 128-27 and may be amended only by the North Carolina General Assembly. At June 30, 2023, the number of participating local governments was as follows:

Cities	429
Counties	100
Special Districts	366
	895

NOTES TO THE FINANCIAL STATEMENTS

Management of the plan is vested in the LGERS Board of Trustees, which consists of 13 members – nine appointed by the Governor, one appointed by the state Senate, one appointed by the state House of Representatives, and the State Treasurer and State Superintendent, who serve as ex officio members.

Benefits provided. LGERS provides retirement, disability and survivor benefits. Retirement benefits are determined as 1.85% of the member's average final compensation times the member's years of creditable service. A member's average final compensation is calculated as the average of a member's four highest consecutive years of compensation. General employee plan members are eligible to retire with unreduced retirement benefits at age 65 with five years of creditable service, at age 60 with 25 years of creditable service, or at any age with 30 years of creditable service or at age 60 with five years of creditable service (age 55 for firefighters and rescue squad workers). Disabled members may qualify for disability benefits at earlier ages. Survivor benefits are available to eligible beneficiaries of general employee plan members who die while in active service or within 180 days of their last day of service and who have either completed 20 years of creditable service regardless of age (15 years of creditable service for firefighters and rescue squad workers who are killed in the line of duty) or have completed five years of service and have reached age 60. Eligible beneficiaries may elect to receive a monthly Survivor's Alternate Benefit for life in lieu of the return of the member's contributions that is generally available to beneficiaries of deceased members. The plan does not provide for automatic post-retirement benefit increases. Cost of living benefit increases are contingent upon investment gains of the plan at the discretion of the LGERS Board of Trustees, except as authorized by the General Assembly.

LGERS plan members who are LEOs are eligible to retire with unreduced retirement benefits at age 55 with five years of creditable service as an officer, or at any age with 30 years of creditable service. LEO plan members are eligible to retire with reduced retirement benefits at age 50 with 15 years of creditable service as an officer. LEOs who complete 25 years of creditable service with 15 years as an officer are eligible to retire with reduced retirement benefits. Survivor benefits are available to eligible beneficiaries of LEO members who die while in active service or within 180 days of their last day of service and who also have either completed 20 years of creditable service regardless of age, or have completed 15 years of creditable service as an LEO and have reached age 50, or have completed five years of creditable service as an LEO and have reached age 55, or have completed 15 years of creditable service as an LEO if killed in the line of duty. Eligible beneficiaries may elect to receive a monthly Survivor's Alternate Benefit for life in lieu of the return of the member's contributions that is generally available to beneficiaries of deceased members.

Contributions. Contribution provisions are established by General Statute 128-30 and may be amended only by the North Carolina General Assembly. Plan members are required to contribute 6% of their annual pay. The required contribution rates for employers are set periodically and affirmed annually by the LGERS Board of Trustees. The Board establishes a funding policy from which accrued liability rates and normal contribution rates are developed by the consulting actuary for general employees and firefighters as well as for law enforcement officers. The sum of those two rates developed under the funding policy and the past service liability contribution rates, if applicable, is the actuarially determined contribution rate (ADC). Further, the required employer contribution rates set by the Board of Trustees may not be less than the normal contribution rates developed under the established funding policy. For the fiscal year ended June 30, 2023, all employers made contributions of 13.10% of covered payroll for law enforcement officers and 12.10% for general employees and firefighters. These were different than the actuarially determined contributions inclusive of the cost of the one-time supplement for retirees approved by the LGERS Board of Trustees in January 2022 and paid in October 2022. The employer contribution rate for law enforcement officers was less than the actuarially determined contribution of 13.44%. The employer contribution rate for general employees and firefighters was greater than the actuarially determined contribution of 11.66%. These amounts, combined with member contributions and investment income, fund the benefits earned by plan members during the year, a payment to reduce the net pension liability, a payment for past service liability, if applicable, and administrative expenses. In addition, employers with an unfunded liability, established when the employer initially enters the system, must make additional contributions towards that liability. The State's responsibility is administrative only.

Refunds of contributions. Members who have terminated service as contributing members, may file an application for a refund of their contributions. By state law, refunds to members include interest (currently 4% per year) regardless of the number of years of retirement service credit or of the reason for separation from service. State law requires a 60 day waiting period after service termination before the refund may be paid. The acceptance of a refund payment cancels the individual's right to any other retirement or survivor benefit provided by LGERS.

3. FIREFIGHTERS' AND RESCUE SQUAD WORKERS' PENSION FUND

Plan administration. The Firefighters' and Rescue Squad Workers' Pension Fund (FRSWPF) is a cost sharing, defined benefit pension plan with a special funding situation in that the State of North Carolina is not the employer but is legally obligated to contribute to the plan. The State established the plan to provide pension benefits for all eligible firefighters and rescue squad workers. Membership is comprised of both volunteer and locally employed firefighters and emergency medical personnel who elect membership. Benefit provisions are established by General Statute 58-86 and may be amended only by the North Carolina General Assembly. At June 30, 2023, there were 1,658 participating fire and rescue units.

NOTES TO THE FINANCIAL STATEMENTS

Management of the plan is vested in the LGERS Board of Trustees, which consists of 13 members – nine appointed by the Governor, one appointed by the state Senate, one appointed by the state House of Representatives, and the State Treasurer and State Superintendent, who serve as ex officio members.

Benefits provided. FRSWPF provides retirement, disability and survivor benefits. The present retirement benefit is \$170 per month. Plan members are eligible to receive the monthly retirement benefit at age 55 with 20 years of fully credited service as a firefighter or rescue squad worker regardless of whether the member has terminated paid employment. Disabled members may be able to receive benefits after attaining age 55 under certain plan provisions. Eligible beneficiaries of members who die before beginning to receive the benefit will receive the amount paid by the member and contributions paid on the member's behalf into the plan. Eligible beneficiaries of members who die after beginning to receive benefits will be paid the amount the member contributed minus the benefits collected. A survivorship benefit in the case of pre-retirement death in the line of duty provides that beneficiaries may receive the same benefit the deceased member would have received beginning when the deceased would have reached age 55, or a return of the member's contributions. The plan does not provide for automatic post-retirement benefit increases.

Contributions. Contribution provisions are established by General Statute 58-86 and may be amended only by the North Carolina General Assembly. Plan member benefits earned during the year, a payment to reduce the net pension liability and administrative expenses are funded by a \$10 monthly contribution by the member, investment income and an actuarially based state appropriation developed under a funding policy adopted by the LGERS Board of Trustees, which may recommend to the North Carolina General Assembly an appropriation that is higher than the actuarially determined contribution. Actual contributions are reported in Section F of this note.

Refunds of contributions. Members who are no longer eligible or choose not to participate in the fund may file an application for a refund of their contributions. Refunds include the member's contributions and contributions paid by others on the member's behalf. No interest will be paid on the amount of the refund. The acceptance of a refund payment cancels the individual's right to any other retirement or survivor benefit provided by FRSWPF.

4. REGISTERS OF DEEDS' SUPPLEMENTAL PENSION FUND

Plan administration. The State of North Carolina administers the Registers of Deeds' Supplemental Pension Fund (RODSPF) which is a cost-sharing, multiple-employer, defined benefit pension plan established by the State of North Carolina to provide supplemental pension benefits for all eligible, retired county registers of deeds. Membership is comprised of registers of deeds who are retired from the Local Governmental Employees' Retirement System or an equivalent locally sponsored plan and have met the statutory eligibility requirements. At June 30, 2023, there were 105 individuals receiving benefits in the plan with 100 counties participating. Benefit provisions are established by General Statute 161-50 and may be amended only by the North Carolina General Assembly. The State's only cost in the plan is administration.

Management of the plan is vested in the LGERS Board of Trustees, which consists of 13 members – nine appointed by the Governor, one appointed by the state Senate, one appointed by the state House of Representatives, and the State Treasurer and State Superintendent, who serve as ex officio members.

Benefits provided. An individual's eligibility to receive benefits under the RODSPF is based on at least 10 years of service as a register of deeds. An individual's benefit amount in a given year is limited to the lesser of the following:

- 1. the member's years of service multiplied by the value of one share of accumulated contributions available for benefits for that year, as specified in G.S. 161-50.3; and
- 2. the benefit amount is limited to the lesser of the following:
 - a. seventy-five percent (75%) of a member's annual compensation, computed on the latest monthly rate (including any and all supplements); for registers of deeds who began serving after September 10, 2009, this 75% limit is applied to the benefit after combining the benefit with the maximum retirement allowance upon retirement under the Local Governmental Employees' Retirement System or equivalent locally sponsored retirement plan; or
 - b. one thousand five hundred dollars (\$1,500).

Because of the statutory limits noted above, not all contributions available for benefits are distributed. The plan does not provide for automatic post-retirement benefit increases.

Contributions. Contribution provisions are established by General Statute 161-50 and may be amended only by the North Carolina General Assembly. Benefits and administrative expenses are funded by investment income and 1.5% of the receipts collected by each County Commission under Article 1 of Chapter 161 of the North Carolina General Statutes. The statutory contribution currently has no relationship to the actuary's required contribution. The actuarially determined contribution for the fiscal year ending 2023 is zero. Registers of Deeds do not contribute.

NOTES TO THE FINANCIAL STATEMENTS

Single-Employer Defined Benefit Plans

5. CONSOLIDATED JUDICIAL RETIREMENT SYSTEM

Plan administration. The State of North Carolina administers the Consolidated Judicial Retirement System (CJRS). This plan is a single-employer, defined benefit pension plan established by the State of North Carolina to provide pension benefits for employees of the State Judicial System. Membership is comprised of judges, district attorneys, public defenders and clerks of court. Benefit provisions are established by Article 4 of General Statute 135 and may be amended only by the North Carolina General Assembly.

Management of the plan is vested in the TSERS Board of Trustees, which consists of 13 members – eight appointed by the Governor, one appointed by the state Senate, one appointed by the state House of Representatives, and the State Treasurer, the State Superintendent and the Director of the Office of State Human Resources who serve as ex officio members.

Benefits provided. The plan provides retirement, disability and death benefits. Retirement benefits are determined as a percentage of the member's final compensation times the member's years of creditable service. The percentage used is determined by the position held by the member. A member's final compensation is the annual equivalent of the rate of compensation most recently applicable to the retiree as a member of the Retirement System. Plan members are eligible to retire with unreduced retirement benefits at age 65 with five years of membership service, or at age 50 with 24 years of creditable service. Plan members are eligible to retire with reduced retirement benefits at age 50 with five years of membership service. The reduced benefit is calculated using the same formula as a service retirement benefit, multiplied by a reduction percentage based on the member's age and/or service at early retirement. Disabled members may qualify for disability benefits at earlier ages. Survivor benefits are available to spouses of deceased retirees and spouses of members who die while in active service after reaching age 50 with five years of service. The plan does not provide for automatic post-retirement benefit increases.

Contributions. Contribution provisions are established by General Statutes 135-68 and 135-69 and may be amended only by the North Carolina General Assembly. Plan members are required to contribute 6% of their annual pay. The contribution rate for the State is set each year by the North Carolina General Assembly in the Appropriations Act based on the actuarially determined rate developed by the consulting actuary. The Board of Trustees must recommend a contribution rate that is no less than the actuarially determined rate. The Board of Trustees may adopt a contribution rate policy that results in a recommendation greater than the actuarially determined rate. The State's contractually required contribution for the year ended June 30, 2023 was 39.95% of covered payroll. This was greater than the actuarially determined contribution of 39.65%. The actuarially determined contribution included 2.64% of covered payroll to satisfy the cost of the one-time cost of living supplement for retirees enacted through Section 39.20.(b) of Session Law 2022-74 and paid in October 2022. This amount, combined with member contributions and investment income, funds the benefits earned by plan members during the year, a payment to reduce the net pension liability and administrative expenses. Actual contributions are reported in Section F of this note.

Refund of contributions. Members who have terminated service as contributing members may file an application for a refund of their contributions. By state law, refunds to members include interest (currently 4% per year) regardless of the number of years of retirement service credit or of the reason for separation from service. State law requires a 60 day waiting period after service termination before the refund may be paid. The acceptance of a refund payment cancels the individual's right to any other retirement or survivor benefit provided by CJRS.

6. LEGISLATIVE RETIREMENT SYSTEM

Plan administration. The State of North Carolina administers the Legislative Retirement System (LRS). This plan is a single-employer, defined benefit pension plan established by the State of North Carolina to provide retirement and disability benefits for members of the General Assembly. The benefit will not be payable while the retiree is employed in a position making him eligible to participate in either the Teachers' and State Employees' Retirement System or Consolidated Judicial Retirement System. Benefit provisions are established by Article 1A of General Statute 120 and may be amended only by the North Carolina General Assembly.

Management of the plan is vested in the TSERS Board of Trustees, which consists of 13 members – eight appointed by the Governor, one appointed by the state Senate, one appointed by the state House of Representatives, and the State Treasurer, the State Superintendent and the Director of the Office of State Human Resources who serve as ex officio members.

Benefits provided. LRS provides retirement, disability and survivor benefits. Retirement benefits are determined as 4.02% of the highest annual compensation as a member of the General Assembly times years of creditable service. A member's highest annual compensation is the 12 consecutive months of salary authorized during the member's final legislative term for the highest position ever held as a member of the General Assembly. Plan members are eligible to retire with unreduced retirement benefits at age 65 after five years of service. Plan members are eligible to retire with reduced retirement benefits at age 60 after five years of service or at age 50 with 20 years of service. Disabled members may qualify for disability benefits at earlier ages. Survivor benefits are available to eligible beneficiaries of contributing members of the General Assembly who die while in active service. The beneficiary will receive a return of the member's contributions with interest. If the member dies while in active service after 12 years of creditable service or after reaching age 60 with five years of

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service, the surviving beneficiary may choose to receive a lifetime monthly benefit instead of a return of contributions with interest. The plan does not provide for automatic post-retirement benefit increases.

Contributions. Contribution provisions are established by General Statutes 120-4.19 and 120-4.20 and may be amended only by the North Carolina General Assembly. Plan members are required to contribute 7% of their annual pay. The contribution rate for the State is set each year by the North Carolina General Assembly in the Appropriations Act based on the actuarially determined rate recommended by the consulting actuary. The annual contributions by the State in a given year when combined with the LRS assets in the pension accumulation fund at the beginning of the year may not be less than the projected retirement allowances and other expected benefits to be paid during that year. For the fiscal year ended June 30, 2023, the State's contractually required contribution was 24.91% of covered payroll. This was greater than the actuarially determined contribution of 24.61%. The actuarially determined contribution included 2.56% of covered payroll to satisfy the cost of the one-time cost of living supplement for retirees enacted through Section 39.20.(c) of Session Law 2022-74 and paid in October 2022. This amount, combined with member contributions and investment income, funds the benefits earned by plan members during the year, a payment to reduce the net pension liability and administrative expenses. Actual contributions are reported in Section F of this note.

Refunds of contributions. Members who have terminated service as contributing members may file an application for a refund of their contributions. By state law, refunds to members include interest (currently 4% per year) regardless of the number of years of retirement service credit or of the reason for separation from service. State law requires a 60 day waiting period after service termination before the refund may be paid. The acceptance of a refund payment cancels the individual's right to any other retirement or survivor benefit provided by LRS.

7. NORTH CAROLINA NATIONAL GUARD PENSION FUND

Plan administration. The North Carolina National Guard Pension Fund (NGPF) is a single-employer, defined benefit pension plan established by the State of North Carolina to provide pension benefits for members of the North Carolina National Guard (NCNG). Membership is comprised of members and former members of the NCNG who have served and qualified for at least 20 years of creditable military service, have at least 15 years of aforementioned service as a member of the NCNG, and have received an honorable discharge from the NCNG. This is a special funding situation because the State is not the employer but is legally obligated to contribute to the plan. Benefit provisions are established by General Statute 127A-40 and may be amended only by the North Carolina General Assembly.

Management of the plan is vested in the TSERS Board of Trustees, which consists of 13 members – eight appointed by the Governor, one appointed by the state Senate, one appointed by the state House of Representatives, and the State Treasurer, the State Superintendent and the Director of the Office of State Human Resources who serve as ex officio members.

Benefits provided. NGPF provides a pension of \$105 per month for 20 years of creditable military service with an additional \$10.50 per month for each additional year of such service; provided, however that the total pension shall not exceed \$210 per month. The plan does not provide for automatic post-retirement benefit increases.

Contributions. Contribution provisions are established by General Statute 127A-40 and may be amended only by the North Carolina General Assembly. Plan member benefits earned during the year, a payment to reduce the net pension liability and administrative expenses are funded by investment income and an actuarially determined state appropriation based on the actuarially determined contribution amount developed by the consulting actuary. The Board of Trustees must recommend a contribution amount that is no less than the actuarially determined amount. The Board of Trustees may adopt a contribution policy that results in a recommendation greater than the actuarially determined amount. NGPF members do not contribute. Actual contributions are reported in Section F of this note.

8. SPECIAL SEPARATION ALLOWANCE

Plan administration. The State provides a special separation allowance (SSA), a single-employer, defined benefit pension plan, for sworn law enforcement officers as defined by General Statutes 135-1(11c) or General Statutes 143-166.30(a)(4) that were employed by State agencies and retired on a basic service retirement under the provisions of General Statutes 135-5(a). To qualify for the allowance, each retired officer must: (1) have completed 30 or more years of creditable service or have attained 55 years of age and completed five or more years of creditable service; and (2) not have attained 62 years of age; and (3) have completed at least five years of continuous service as a law enforcement officer immediately preceding a service retirement.

Benefits provided. Each eligible officer is paid an annual separation allowance equal to 0.85% of the officer's most recent base rate of compensation for each year of creditable service. These benefits are funded on a pay-as-you-go basis with each state agency responsible for the benefits to their former employees. The benefits are established in General Statute 143-166.41 and may be amended only by the General Assembly.

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There is no statewide administration of the SSA. The SSA is not administered through a trust and therefore no assets are accumulated. Funds for this allowance are appropriated annually in the budget of each affected state agency.

Defined Contribution Plans

9. SHERIFFS' SUPPLEMENTAL PENSION FUND

Plan administration. This plan is a defined contribution pension plan established by the State of North Carolina to provide supplemental pension benefits for all eligible, retired county sheriffs. Membership is comprised of sheriffs who are retired from the Local Governmental Employees' Retirement System and beneficiaries that meet the statutory eligibility requirements. At June 30, 2023, there were 108 sheriffs and no beneficiaries enrolled in the plan with 80 of the State's 100 counties participating.

Benefits provided. An individual's benefits for the year are calculated as a share of accumulated contributions available for benefits for that year, subject to certain statutory limits. An individual's eligibility is based on minimum years of service as a sheriff with the individual's share increasing with years of service. Because of the statutory limits noted above, not all contributions available for benefits are distributed. The North Carolina Department of Justice administers the plan. If the plan purchases any investments, they are held as part of the State Treasurer's External Investment Pool. The State's only cost in the plan is administration.

Contributions. Receipts collected by each county's Clerk of Superior Court under General Statutes 7A-304(a)(3a), along with investment income, support the plan's benefits and administrative expenses. At the beginning of each calendar year, the Department of Justice invoices and collects from county governments, on a pro rata basis by population, an amount of funds needed in addition to the receipts collected, to pay the pension benefits for that year. Sheriffs do not contribute to the plan. For the fiscal year ended June 30, 2023, the Clerks remitted \$692 thousand and \$631 thousand was invoiced to the county governments, with \$596 thousand collected. All benefit and contribution provisions are established by Chapter 143, Article 12H of the General Statutes and may be amended only by the North Carolina General Assembly.

10. IRC SECTION 401 (K) PLAN

Effective January 1, 1985, Chapter 135, Article 5 of the General Statutes authorized the creation of the Supplemental Retirement Income Plan of North Carolina (the NC 401(k) Plan) in accordance with Internal Revenue Code (IRC) Section 401(k). The Supplemental Retirement Board of Trustees (the Board) and the Retirement Systems Division of the Department of State Treasurer (the Department) have the responsibility for administering the NC 401(k) Plan according to the plan document, the North Carolina General Statutes, and the IRC, with the Department serving as the primary administrator carrying out the provisions of the plan, as directed by the Board. Empower Retirement, LLC (Employer) began providing recordkeeping, administration, and education services after acquiring Prudential Retirement Insurance and Annuity Company on April 1, 2022.

All members of the Teachers' and State Employees' Retirement System, Consolidated Judicial Retirement System, Legislative Retirement System, Local Governmental Employees' Retirement System and University Optional Retirement Program and retirement and pension plans sponsored by political subdivisions of the State that qualify under Section 401(a) of the IRC, law enforcement officers as defined under North Carolina General Statutes 143-166.30 and 143-166.50 and individuals who are required under the IRC to be eligible for participation in the NC 401(k) Plan, are eligible to enroll in the NC 401(k) Plan and may contribute up to 80% (limited to an Internal Revenue maximum dollar amount) of their compensation during the plan fiscal year. The assets of the NC 401(k) Plan are held in trust for the exclusive benefit of participants and their beneficiaries and for paying the reasonable costs of the plan. All contributions and costs of administering the NC 401(k) Plan are the responsibility of the participants. All contributions and earnings are immediately vested in the name of each participant, subject to the felony forfeiture provisions for law enforcement officers in General Statutes 143-166 30(g1) and 143-165 50(e2). At December 31, 2022, there were approximately 281,300 employees enrolled with 1,009 participating employers.

The NC 401(k) Plan is a defined contribution pension plan and benefits of the Plan depend solely on amounts contributed to the plan plus investment earnings net of expenses. Members of the NC 401(k) Plan may receive their benefits upon retirement, termination, hardship, death, or the attainment of age 59 ½.

Participants may choose from several withdrawal options, including systematic withdrawals, full or partial lump-sum withdrawals, or transfer of their balance to an eligible employer-sponsored retirement plan or IRA.

Financial statements are based on the Plan's fiscal year. The audited statements for the year ended December 31, 2022, are presented in this financial report as a pension and other employee benefit trust fund. The NC 401(k) Plan's financial statements are prepared using the accrual basis of accounting. Notes receivable represent loans to participants and are reported at outstanding principal balances. The NC 401(k) Plan's financial statements are available online at myNCRetirement.com or by contacting the N.C. Department of State Treasurer, 3200 Atlantic Avenue, Raleigh, NC 27604-1668.

NOTES TO THE FINANCIAL STATEMENTS

In addition to the voluntary contribution criteria above, General Statutes 143-166.30 and 143-166.50 require employer contributions to the NC 401(k) Plan to provide benefits for all law enforcement officers (LEOs) employed by State and local governments. Participation begins at the date of employment. Employers are required to contribute monthly to the individual accounts of participants an amount equal to 5% of each officer's monthly salary. In addition, State law enforcement officers receive a contribution into the NC 401(k) equal to a pro rata share of \$.50 for each court cost assessed and collected under General Statute 7A-304, while \$1.25 of this assessment goes to local law enforcement officers, except Sheriffs. All contributions are immediately vested in the name of each participant, subject to the felony forfeiture provisions for law enforcement officers in General Statutes 143-166.30(g1) and 143-166.50(e2). At December 31, 2022, 53 state agencies and component units along with 435 local governmental units outside the reporting entity contributed the required 5%. In addition, six state agencies and 510 local government employers contributed to the NC 401(k) Plan on a voluntary basis. There were approximately 13,900 LEOs actively contributing to the NC 401(k) Plan and approximately 25,600 LEOs receiving employer contributions as of December 31, 2022.

The NC 401(k) Plan reported total member contributions of \$467.36 million. The payrolls for law enforcement officers, on which the required contributions were based for the year ended December 31, 2022, amounted to \$334.72 million for the State, \$33.27 million for universities, and \$9.67 million for community colleges, public schools and other miscellaneous component units. The required 5% employer's contribution was made by the State for \$16.74 million, by universities for \$1.66 million, and by the remaining component units, public schools and community colleges for \$483 thousand. In addition, the State contributed \$279 thousand for required court cost assessments. The amount of pension expense recognized in the current fiscal year is equal to the employer contributions.

The NC 401(k) Plan discloses a related party transaction in Note 20 of this ACFR. The NC 401(k) Plan's investment risks are described in Note 3.

11. OPTIONAL RETIREMENT PROGRAM

The Optional Retirement Program (ORP) is a defined contribution pension plan that provides retirement benefits with options for payments to beneficiaries in the event of the participant's death. Faculty and staff of the University of North Carolina (UNC) System may join the ORP instead of the Teachers' and State Employees' Retirement System. The ORP is administered by the UNC System. At June 30, 2023, the plan had 23,014 participants with 19 constituent institutions of the UNC System participating.

Benefits are provided by means of contracts issued and administered by the privately-operated Teachers' Insurance and Annuity Association (TIAA) and Fidelity Investments. Participants' eligibility and contributory requirements are established in General Statutes 135-5.1 and may be amended only by the North Carolina General Assembly. Participants are always fully vested in their own contributions to the plan and their investment earnings. Participants are fully vested in the university's contributions and earnings after five years of participating in the ORP.

Participants contribute 6% of compensation and the university contributes 6.84%. The universities contributed \$156.96 million for the fiscal year ended June 30, 2023. Annual covered payroll was \$2.29 billion and employer contributions expressed as a percentage of annual payroll were 6.84% for the period. Employee contributions expressed as a percentage of annual covered payroll were the required 6% with actual employee contributions of \$137.68 million for the fiscal year ended June 30, 2023. The amount of pension expense recognized in the current fiscal year related to ORP was \$135.15 million. Forfeitures reduced the universities' pension expense by \$21.81 million for the fiscal year ended June 30, 2023. Any liabilities reported by the universities are immaterial to this ACFR.

C. Plan Membership

The following table summarizes membership information by plan at the actuarial valuation date:

	Cos	t-Sharing, M	ultiple-Employe	r		Single-Em	ployer	
							North	
	Teachers'	Local	Firefighters'	Registers			Carolina	Special
	and State	Govern-	and Rescue	of	Consolidated		National	Separation
	Employees'	mental	Squad	Deeds'	Judicial	Legislative	Guard	Allowance
Inactive plan members or beneficiaries currently receiving benefits	246,374	82,466	15,014	101	816	288	4,681	1,044
Inactive plan members entitled to								
but not yet receiving benefits	214,465	101,818	111	-	60	108	2,885	-
Active plan members	302,293	135,706	43,268	104	581	170	5,614	4,934
	763,132	319,990	58,393	205	1,457	566	13,180	5,978
Valuation date	12-31-22	12-31-22	12-31-22	12-31-22	12-31-22	12-31-22	12-31-22	12-31-21

NOTES TO THE FINANCIAL STATEMENTS

D. Investments

Investment policy. The pension plans' policy regarding the allocation of invested assets is established and may be amended by the State Treasurer. Plan assets are managed by the Investment Management Division of the North Carolina Department of the State Treasurer (IMD) under the direction of the State Treasurer. It is the policy of the State Treasurer to invest plan assets with a focus on protection through diversification, achievement of stable and consistent returns that meet or exceed benchmarks and actuarial assumptions over a long-term projection, with a primary objective of ensuring that all liability payments and obligations are met. The target asset allocation is developed based upon analysis of optimized portfolios, utilizing risk and return characteristics of eligible asset classes, and selecting the most efficient portfolio for a given level of risk.

For all plans participating in the External Investment Pool, the following table displays the adopted asset allocation policy as of June 30, 2023:

Asset Class	Target Allocation
Fixed Income	33%
Global Equity	38%
Real Estate	8%
Alternatives	8%
Opportunistic Fixed Income	7%
Inflation Sensitive	6%
Total	100%

The preceding table reflects an investment allocation which became effective July 1, 2022. The Registers of Deeds' Supplemental Pension fund is 100% invested in the Bond Index External Investment Pool.

Rate of return. For the year ended June 30, 2023, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expense was:

		Cost-Sharing, Mu	ıltiple-Employer		S	ingle-Employer	
	Teachers' and State Employees'	Local Govern- mental	Firefighters' and Rescue Squad	Registers of Deeds'	Consolidated Judicial	Legislative	North Carolina National Guard
Money-weighted Rate of Return	5.27%	5.27%	5.25%	(1.16%)	5.25%	5.19%	5.12%

The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

E. Net Pension Liability of Participating Employers

The components of the net pension liability of the participating employers at June 30, 2023, were as follows (dollars in thousands):

	C	Cost-Sharing, Multiple-Employer						Single-Employer				
												North
	Teachers'	Local	Fir	refighters'	F	Registers					(Carolina
	and State	Govern-	an	d Rescue		of	C	onsolidated			ľ	Vational
	Employees'	mental		Squad		Deeds'		Judicial	Le	gislative	_	Guard
Total pension liability	\$ 97,921,037	\$ 37,828,184	\$	505,749	\$,	\$	883,416	\$	30,433	\$	143,712
Plan fiduciary net position	81,249,054	31,205,097		496,440	_	45,643		682,362		28,748	_	175,727
Net pension liability (asset)	<u>\$ 16,671,983</u>	\$ 6,623,087	\$	9,309	\$	(12,017)	\$	201,054	\$	1,685	\$	(32,015)
Plan fiduciary net position as a percentage of the total pension liability	82.97%	82.49%		98.16%		135.74%		77.24%		94.46%		122.28%

NOTES TO THE FINANCIAL STATEMENTS

Actuarial assumptions. The total pension liability was determined by actuarial valuations as of December 31, 2022, using the following actuarial assumptions, applied to all prior periods included in the measurement. The total pension liability was then rolled forward to June 30, 2023 utilizing update procedures incorporating the actuarial assumptions. The actuarial assumptions used in the December 31, 2022 valuations were based on the results of an actuarial experience review for the period January 1, 2015 through December 31, 2019. The actuarial assumptions used in the December 31, 2021 valuation for the Special Separation Allowance were based on the results of an actuarial experience review for the period January 1, 2015 through December 31, 2019.

	C	ost-Sharing, Mu	ıltiple-Employer		S			
	Teachers' and State Employees'	Local Govern- mental	Firefighters' and Rescue Squad	Registers of Deeds'	Consolidated Judicial	Legislative	North Carolina National Guard	
	(1)	(1)		(1)	(1)	(1)		
Valuation date	12/31/22	12/31/22	12/31/22	12/31/22	12/31/22	12/31/22	12/31/22	
Inflation	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	
Salary Increases	3.25-8.05%	3.25-8.25%	N/A	3.25-8.25%	3.25-4.75%	3.25%	N/A	
Investment Rate of Return (2)	6.5%	6.5%	6.5%	3%	6.5%	6.5%	6.5%	

- (1) Salary increases include 3.25% inflation and productivity factor
- (2) Investment rate of return includes inflation assumption and is net of pension plan investment expense.
- N/A Not Applicable

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 ending 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 ending 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 ending 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.

The retirement plans currently use mortality tables that vary by age, gender, employee group (i.e. teacher, general, law enforcement officer) and health status (i.e. disabled and healthy). The current mortality rates are based on published tables and based on studies that cover significant portions of the U.S. public plan population. The mortality rates also contain a provision to reflect future mortality improvements.

Future ad hoc COLA amounts are not considered to be substantively automatic and are therefore not included in the measurement. The projected long-term investment returns and inflation assumptions are developed through review of current and historical capital markets data, sell-side investment research, consultant whitepapers, and historical performance of investment strategies. Fixed income return projections reflect current yields across the U.S. Treasury yield curve and market expectations of forward yields projected and interpolated for multiple tenors and over multiple year horizons. Global public equity return projections are established through analysis of the equity risk premium and the fixed income return projections. Other asset categories and strategies' return projections reflect the foregoing and historical data analysis. These projections are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

Best estimates of arithmetic real rates of return for each major asset class included in the pension plan's target asset allocation as of June 30, 2023 (see the discussion of the pension plan's investment policy in Section D) are summarized in the following table:

Asset Class	Long-Term Expected Real Rate of Return
Fixed Income	0.9%
Global Equity	6.5%
Real Estate	5.9%
Alternatives	8.2%
Opportunistic Fixed Income	5.0%
Inflation Sensitive	2.7%

NOTES TO THE FINANCIAL STATEMENTS

The information in the preceding table is based on 30 year expectations developed with an investment consulting firm as part of a study that was completed in early 2022, and is part of the asset liability and investment policy of the North Carolina Retirement Systems. The long-term nominal rates of return underlying the real rates of return are arithmetic annualized figures. The real rates of return are calculated from nominal rates by multiplicatively subtracting a long-term inflation assumption of 2.25%. Return projections do not include any excess return expectations over benchmark averages. All rates of return and inflation are annualized. The long-term expected real rate of return for the Bond Index Investment Pool as of June 30, 2023 is 0.78%.

Discount rate. The discount rate used to measure the total pension liability was 6.5% except for Registers of Deeds' Supplemental Pension Fund which was 3% for the December 31, 2022 valuation. This discount rate is in line with the long-term nominal expected return on pension plan investments. The calculation of the net pension liability is a present value calculation of the future net pension payments. These net pension payments assume that contributions from plan members will be made at the current statutory contribution rate and that contributions from employers will be made at the contractually required rates, actuarially determined. Based on those assumptions, the pension plans' fiduciary net position was projected to be available to make all projected future benefit payments of the current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Sensitivity of the Plans' net pension liability to changes in the discount rate. The following presents the net pension liability of the plans at June 30, 2023 calculated using the discount rate of 6.5% (3% for RODSPF), as well as what the net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (5.5%; RODSPF 2%) or 1-percentage-point higher (7.5%; RODSPF 4%) than the current rate (dollars in thousands):

	Current 1% Decrease Discount (5.5%) Rate (6.5%)			Discount		% Increase (7.5%)
Cost-Sharing, Multiple-Employer TSERS' net pension liability LGERS' net pension liability	\$	28,621,888 11,474,238	\$	16,671,983 6,623,087	\$	6,813,699 2,629,165
FRSWPF's net pension liability (asset)	73,581		9,30			(43,243)
Single-Employer CJRS' net pension liability LRS' net pension liability (asset) NCNG's net pension asset	\$	294,847 4,515 (14,784)	\$	201,054 1,685 (32,015)	\$	121,206 (736) (46,119)
	19	% Decrease (2%)		Current Discount Rate (3%)	19	% Increase (4%)
Cost-Sharing, Multiple-Employer	Ф	(0.202)	Ф	(12.015)	Ф	(15.000)
ROD's net pension asset	\$	(8,203)	\$	(12,017)	\$	(15,233)

NOTES TO THE FINANCIAL STATEMENTS

F. GASB Statements 68 and 73 Employer Reporting

1. EMPLOYER CONTRIBUTIONS

The following table presents the primary government's and component units' contributions recognized by the pension plans at June 30, 2023 (dollars in thousands):

								North	
	Teachers'	Fire	efighters'					Carolina	
	and State	and	d Rescue	Con	solidated			National	
	Employees'		Squad	J	udicial	Legi	slative	Guard	Total
Primary Government	\$ 691,588	\$	19,702	\$	34,952	\$	901	\$ 11.032	\$ 758,175
· ·	\$ 091,366	Φ	19,702	Ф	34,932	Φ	901	\$ 11,032	\$ 730,173
Component Units									
University of North Carolina System	\$ 472,508	\$	_	\$		\$		\$ —	\$ 472,508
Community Colleges	174,534		_				_	_	174,534
Other Component Units	6,710								6,710
Total Contributions	\$ 1,345,340	\$	19,702	\$	34,952	\$	901	\$ 11,032	\$ 1,411,927

2. PENSION LIABILITIES, PENSION EXPENSE, AND DEFERRED OUTFLOWS OF RESOURCES AND DEFERRED INFLOWS OF RESOURCES RELATED TO PENSIONS

As of June 30, 2023, the primary government and component units reported pension liabilities for the defined benefit pension plans administered by the State and the defined benefit pension plan provided by the State as follows (dollars in thousands):

		_	Component Units						
			Uni	versity of				Other	
	Primary		Nort	h Carolina	Co	Community		mponent	
	Governme	nt_	Sy	rstem (1)	Colleges			Units	
Proportionate Share of the Net Pension Liability									
Teachers' and State Employees' Retirement System	\$ 3,308,	333	\$	2,212,675	\$	820,596	\$	28,700	
Firefighters' and Rescue Squad	19,0	662		_		_		_	
Consolidated Judicial	174,	571		_		_		_	
Legislative	1,:	30		_		_		_	
Pension Liability									
Special Separation Allowance	310,	96							
Total Pension Liability	\$ 3,814,	92	\$	2,212,675	\$	820,596	\$	28,700	

⁽¹⁾ Rex Healthcare is part of the University of North Carolina Health Care System and administers its own Rex Employees' Retirement Plan. It does not participate in TSERS. The net pension liability of Rex's retirement plan is excluded from the above amounts. At June 30, 2023, Rex Healthcare had a net pension liability of \$138.31 million.

As of June 30, 2023, the primary government reported a net pension asset of \$15.33 million for the North Carolina National Guard defined benefit pension plan that is administered by the State.

Each net pension liability was measured as of June 30, 2022, and the total pension liability used to calculate each net pension liability was determined by an actuarial valuation as of December 31, 2021. Update procedures were used to roll forward the total pension liability to

⁽²⁾ Centennial Authority is a component unit of the State of North Carolina and participates in the Local Governmental Employees' Retirement System (LGERS). It does not participate in TSERS. The net pension liability of Centennial Authority's retirement plan is excluded from the above amounts. At June 30, 2023, Centennial Authority did not have a net pension liability.

NOTES TO THE FINANCIAL STATEMENTS

June 30, 2022. For TSERS, the primary government's and each component unit's proportion of the collective net pension liability was based on a projection of the present value of future salaries relative to the projected present value of future salaries of all participating employers, actuarially determined. The primary government's proportion of the collective net pension liability was further allocated to individual proprietary funds based on each fund's proportionate share of the total prior year pension contributions.

The primary government's pension liability was measured as of June 30, 2022. The total pension liability was determined by an actuarial valuation as of December 31, 2021. Update procedures were used to roll forward the total pension liability to June 30, 2022. The discount rate used to measure the total pension liability was 3.54% at June 30, 2022. The economic assumptions used for the discount rate are based on the yield of the Bond Buyer General Obligation 20-year Municipal Bond Index as of the measurement date.

The primary government's and component units' proportions of the collective net pension liability for the Teachers' and State Employees' Retirement System as of June 30, 2022 and 2021 were as follows:

		Component Units					
		University of		Other			
	Primary	North Carolina	Community	Component			
	Government	System	Colleges	Units			
Teachers' and State Employees' Retirement System							
Proportion – June 30, 2022	22.29%	14.91%	5.53%	0.19%			
Proportion – June 30, 2021	23.50%	15.26%	5.58%	0.18%			
Change – Increase (Decrease)	(1.21)	(0.35)	(0.05)	0.01			

For the year ended June 30, 2023, the primary government and component units recognized pension expense for the defined benefit pension plans administered by the State and the defined benefit pension plan provided by the State as follows (dollars in thousands):

				(Comp	onent Units		
			Un	iversity of			(Other
	Primary			th Carolina	Co	mmunity	Con	nponent
	Government			System		Colleges	Units	
Pension Expense								
Teachers' and State Employees' Retirement System	\$	748,150	\$	467,377	\$	170,933	\$	6,854
Consolidated Judicial		46,900		_		_		_
Legislative		196		_		_		_
Special Separation Allowance		38,748				_		
Total Pension Expense	\$	833,994	\$	467,377	\$	170,933	\$	6,854

As a result of its requirement to contribute, the primary government recognized expense of \$5.1 million for FRSWPF and \$(10.8) million for NGPF for the year ended June 30, 2023. The primary government's proportion of the collective net pension liability for Firefighters' and Rescue Squad Workers' and for North Carolina National Guard was 100% and 100%, respectively, as of June 30, 2022 and 2021.

NOTES TO THE FINANCIAL STATEMENTS

At June 30, 2023, the primary government and component units reported deferred outflows of resources related to the defined benefit pension plans administered by the State and the defined benefit pension plan provided by the State from the following sources (dollars in thousands):

	Deferred Outflows of Resources													
	ä	Feachers' and State mployees'	and	Firefighters' and Rescue Squad		onsolidated Judicial		Legislative		North Carolina National Guard	S	Special eparation .llowance		Total
Primary Government: Difference between actual and expected experience Changes of assumptions	\$	14,413 261,087	\$	410 3,261	\$	20,039 23,310	\$	_ _ _	\$		\$	34,726 39,300	\$	69,588 326,958
Net difference between projected and actual earnings on pension plan investments Change in proportion and differences between agency's		1,086,578		29,665		41,049		1,772		10,464		_		1,169,528
contributions and proportionate share of contributions Contributions subsequent to the		122,682		_		_		_		_		_		122,682
measurement date Transactions subsequent to the measurement date		691,588		19,702		34,952		901		11,032		22,789		758,175 22,789
Total	\$	2,176,348	\$	53,038	\$	119,350	\$	2,673	\$	21,496	\$	96,815	\$	2,469,720
Component Units:														
University of North Carolina System Difference between actual and expected experience Changes of assumptions Net difference between projected and actual earnings on pension plan investments Change in proportion and differences between agency's	\$	9,634 174,572 726,731												
contributions and proportionate share of contributions Contributions subsequent to the measurement date		23,014												
Total (1)	\$	472,508 1,406,459												
Community Colleges Difference between actual and expected experience Changes of assumptions Net difference between projected and actual earnings on pension	\$	3,573 64,742												
plan investments Change in proportion and differences between agency's contributions and proportionate share of contributions Contributions subsequent to the measurement date		269,517 13,301 174,534												
Total	\$	525,667												
Other Component Units Difference between actual and expected experience Changes of assumptions Net difference between projected and actual earnings on pension plan investments Change in proportion and differences between agency's	\$	125 2,264 9,426												
contributions and proportionate share of contributions Contributions subsequent to the measurement date		1,552 6,710												
Total (2)	\$	20,077												
				_			_							

⁽¹⁾ Rex Healthcare is part of the University of North Carolina Health Care System and administers its own Rex Employees' Retirement Plan. It does not participate in TSERS. Deferred outflows of resources of Rex's retirement plan are excluded from the above amounts. At June 30, 2023, Rex Healthcare had deferred outflows of resources of \$61.680 million.

⁽²⁾ Centennial Authority is a component unit of the State of North Carolina and participates in the Local Governmental Employees' Retirement System (LGERS). It does not participate in TSERS. Deferred outflows of resources of Centennial Authority's retirement plan are excluded from the above amounts. At June 30, 2023, Centennial Authority had deferred outflows of resources of \$117 thousand.

NOTES TO THE FINANCIAL STATEMENTS

At June 30, 2023, the primary government and component units reported deferred inflows of resources related to the defined benefit pension plans administered by the State and the defined benefit pension plan provided by the State from the following sources (dollars in thousands):

					Deferre	ed Inflow	s of Resourc	es				
	an	eachers' d State ployees'	and	efighters' I Rescue Squad	solidated dicial	Leg	gislative		North Carolina National Guard	Se	Special paration lowance	Total
Primary Government: Difference between actual and expected experience Changes of assumptions Change in proportion and differences between agency's contributions and proportionate	\$	45,101	\$	9,561 2,531	\$ _	\$	140	\$	13,367	\$	26,639	\$ 68,169 29,170
share of contributions		71,625			 							 71,625
Total	\$	116,726	\$	12,092	\$ 	\$	140	\$	13,367	\$	26,639	\$ 168,964
Component Units:												
University of North Carolina System Difference between actual and expected experience Change in proportion and differences between agency's contributions and proportionate	\$	30,159										
share of contributions		34,751										
Total ⁽¹⁾	\$	64,910										
Community Colleges Difference between actual and expected experience Change in proportion and differences between agency's contributions and proportionate	\$	11,185										
share of contributions		12,136										
Total	\$	23,321										
Other Component Units Difference between actual and expected experience Change in proportion and differences between agency's contributions and proportionate	\$	391										
share of contributions		103										
Total ⁽²⁾	\$	494										

⁽¹⁾ Rex Healthcare is part of the University of North Carolina Health Care System and administers its own Rex Employees' Retirement Plan. It does not participate in TSERS. Deferred inflows of resources of Rex's retirement plan are excluded from the above amounts. At June 30, 2023, Rex Healthcare had deferred inflows of resources of \$15.401 million.

⁽²⁾ Centennial Authority is a component unit of the State of North Carolina and participates in the Local Governmental Employees' Retirement System (LGERS). It does not participate in TSERS. Deferred inflows of resources of Centennial Authority's retirement plan are excluded from the above amounts. At June 30, 2023, Centennial Authority had deferred inflows of resources of four thousand.

NOTES TO THE FINANCIAL STATEMENTS

Amounts reported as deferred outflows of resources related to contributions or transactions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the year ended June 30, 2024. These amounts are found in the preceding Deferred Outflows of Resources table. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized as pension expense as follows (dollars in thousands):

Teachers' and State Employees'

				C	ompo	onent Units		
			Un	iversity of		(Other	
	P	rimary	No	rth Carolina	Co	mmunity	Con	nponent
Year Ending June 30	Go	Government		System	C	olleges		Jnits
2024	\$	399,075	\$	237,211	\$	88,221	\$	3,748
2025		349,384		214,063		82,047		3,293
2026		98,811		69,392	28,345			1,314
2027		520,764		348,375		129,199		4,518

Other Plans

		Primary Government									
								North			
	Fire	Firefighters'						Carolina	S	pecial	
	and	Rescue	Con	solidated			1	National		paration	
Year Ending June 30	S	quad	J	Judicial		Legislative		Guard		Allowance	
2024	- \$	2,529	\$	27,584	\$	244	\$	(11,121)	\$	16,835	
2025		3,155		26,812		347		2,122		14,747	
2026		1,254		10,270		196		1,343		9,344	
2027		14,306		19,732		845		4,753		6,120	
2028		_		_		_		_		1,854	
Thereafter										(1,513)	

Unrestricted net position has been significantly affected by transactions that resulted in the recognition of deferred outflows of resources and deferred inflows of resources related to the defined benefit pension plans administered by the State and the defined benefit pension plan provided by the State. As of June 30, 2023, the effect of these transactions on unrestricted net position is presented as follows (dollars in thousands):

	Governmental Activities		Ві	usiness- type Activities		otal Primary Government	Component Units		
Unrestricted net position	\$	15,430,683	\$	6,443,501	\$	21,874,184	\$	(1,538,273)	
Effect on unrestricted net position									
TSERS	\$	(1,230,186)	\$	(19,026)	\$	(1,249,212)	\$	5,102,900	
FRSWPF		21,284		_		21,284		_	
CJRS		(55,221)		_		(55,221)			
LRS		1,003		_		1,003			
SSA		(310,126)				(310,126)	_		
Total effect on unrestricted net position	\$	(1,573,246)	\$	(19,026)	\$	(1,592,272)	\$	5,102,900	
Restricted net position	\$	1,788,260	\$	166,230	<u>\$</u>	1,954,490	\$	11,446,347	
Effect on restricted net position NCNG	\$	1,960	\$	_	\$	1,960	\$	_	
Total effect on restricted net position	\$	1,960	\$		\$	1,960	\$		

NOTES TO THE FINANCIAL STATEMENTS

Actuarial assumptions. The total pension liability in the December 31, 2021 actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement:

					North	
	Teachers'	Firefighters'			Carolina	Special
	and State	and Rescue	Consolidated		National	Separation
	Employees'	Squad	Judicial	Legislative	Guard	Allowance
	(1)		(1)	(1)		(3)
Valuation date	12/31/21	12/31/21	12/31/21	12/31/21	12/31/21	12/31/21
Inflation	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%
Salary Increases	3.25-8.05%	N/A	3.25-4.75%	3.25%	N/A	3.25% - 8.05%
Investment Rate of Return (2)	6.5%	6.5%	6.5%	6.5%	6.5%	N/A

^{(1) -} Salary increases include 3.5% inflation and productivity factor.

The following table presents the adopted asset allocation policy and best estimates of arithmetic real rates of return for each major asset class as of June 30, 2022:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Fixed Income	29%	1.1%
Global Equity	42%	6.5%
Real Estate	8%	5.9%
Alternatives	8%	7.5%
Opportunistic Fixed Income	7%	5.0%
Inflation Sensitive	6%	2.7%
Total	100%	

^{(2) -} Investment rate of return includes inflation assumption and is net of pension plan investment expense.

^{(3) -} Salary increases include 2.5% inflation and 1% real wage growth.

N/A - Not Applicable

NOTES TO THE FINANCIAL STATEMENTS

Sensitivity of the net pension liability to changes in the discount rate. The following presents the primary government's and component units' net pension liability calculated using the discount rate of 6.5%, as well as what the proportionate share of the net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (5.5%) or 1-percentage-point higher (7.5%) than the current rate (dollars in thousands):

Not Poncion	Lightlity	(Accet	٠
Net Pension	Liaumity	(ASSCI)	,

	1%	% Decrease (5.5%)	Current Discount ate (6.5%)	19	1% Increase (7.5%)	
Teachers' and State Employees'						
Proportionate Share						
Primary Government	\$	5,850,181	\$ 3,308,833	\$	1,211,149	
University of North Carolina System		3,912,080	2,212,675		809,909	
Community Colleges		1,450,858	820,596		300,368	
Other Component Units		50,752	28,700		10,507	
Firefighters' and Rescue Squad	\$	83,428	\$ 19,662	\$	(32,480)	
Consolidated Judicial	\$	262,462	\$ 174,571	\$	99,648	
Legislative	\$	4,335	\$ 1,530	\$	(870)	
North Carolina National Guard	\$	2,485	\$ (15,327)	\$	(29,932)	

Sensitivity of the total pension liability to changes in the discount rate. The following presents the total pension liability calculated using the discount rate of 3.54%, as well as what the total pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (2.54%) or 1-percentage-point higher (4.54%) than the current rate (dollars in thousands):

Total Pension Liability

			Current	
	1%	% Decrease (2.54%)	Discount te (3.54%)	6 Increase (4.54%)
Special Separation Allowance		332,684	\$ 310,196	\$ 289,511

NOTES TO THE FINANCIAL STATEMENTS

3. CHANGES IN PENSION LIABILITY FOR SINGLE-EMPLOYER, DEFINED-BENEFIT PLANS

The following schedule presents the changes in the pension liability for the single-employer, defined-benefit plans as of June 30, 2023 (dollars in thousands):

	nsolidated Judicial	Leg	gislative	Sej	Special paration lowance
Total pension liability					
Service Cost	\$ 14,320	\$	796	\$	14,136
Interest	51,397		1,925		6,924
Changes of benefit terms	2,127		94		-
Differences between expected and actual experience	22,417		(281)		9,854
Changes of assumptions	-		-		(31,526)
Benefit payments, including refunds of member contributions	 (53,819)		(2,358)		(19,608)
Net change in total pension liability	36,442		176		(20,220)
Total pension liability - beginning (a)	802,893		29,974		330,416
Total pension liability - ending (c)	\$ 839,335	\$	30,150	\$	310,196
Plan fiduciary net position					
Contributions-employer	\$ 33,428	\$	1,029	\$	
Contributions-member	5,470		253		
Net investment income	(51,610)		(2,183)		_
Benefit payments, including refunds of member	, ,		,		
contributions	(53,819)		(2,358)		_
Administrative expense	(29)		(15)		_
Other	 4		(1)		
Net change in plan fiduciary net position	(66,556)		(3,275)		
Plan fiduciary net position - beginning (b)	 731,320		31,895		
Plan fiduciary net position - ending (d)	\$ 664,764	\$	28,620	\$	
Net pension liability - beginning (a) - (b)	71,573		(1,921)		_
Net pension liability - ending (c) - (d)	\$ 174,571	\$	1,530	\$	