

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. Nine of the plans in this note do not issue separate financial statements, nor are they 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 CAFR. The Supplemental Retirement Income Plan of North Carolina (401(k) Plan) issues separately audited financial statements. Information on how to obtain the 401(k) Plan financial statements is found in Section B.9. 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 are the sole participants in the Long-term Investment, the 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 market 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, 2017, the number of participating employers was as follows:

State of North Carolina.....	1
LEAs	116
Charter Schools.....	61
Community Colleges.....	58
University of North Carolina System....	19
Other Component Units.....	5
	<u>260</u>

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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 full 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 partial 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 or a return of the member’s contributions. The plan does not provide for automatic post-retirement benefit increases.

TSERS plan members who are LEOs are eligible to retire with full 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 partial retirement benefits at age 50 with 15 years of creditable service as an officer. 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 or a return of the member’s contributions.

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 based on the actuarially determined rate recommended by the actuary. The State and other participating employers’ contractually required contribution rate for the year ended June 30, 2017 was 9.98% of covered payroll. This was greater than the actuarially determined contribution of 9.96%. This amount, combined with plan member contributions and investment income fund the benefits earned by plan members during the year and administrative expenses. Actual contributions are reported in Section F of this note.

Refunds of contributions. Members who have terminated service as a contributing member, may file an application for a refund of their contributions. By state law, refunds to members include interest (currently 4%) 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 and local law enforcement officers of participating local governmental entities. Benefit provisions are established by General Statute 128-27 and may be amended only by the North Carolina General Assembly. At June 30, 2017, the number of participating local governments was as follows:

Cities	427
Counties	100
Special Districts	368
	<u>895</u>

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.

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Benefits provided. LGERS provides retirement 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. Plan members are eligible to retire with full 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. Plan members are eligible to retire with partial retirement benefits at age 50 with 20 years of creditable service or at age 60 with five years of creditable service (age 55 for firefighters and rescue squad workers). Survivor benefits are available to eligible beneficiaries of 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 or a return of the member's contributions. 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 full 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 partial retirement benefits at age 50 with 15 years of creditable service as an officer. 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 or a return of the member's contributions.

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 actuarially determined contribution rate for employers is set annually by the LGERS Board of Trustees. For the fiscal year ended June 30, 2017, all employers made contributions of 8% of covered payroll for law enforcement officers and 7.25% for general employees and firefighters. These were greater than the actuarially determined contributions of 7.12% for law enforcement officers and 5.5% for general employees and firefighters. These amounts, combined with member contributions and investment income fund the benefits earned by plan members during the year and administrative expenses. In addition, employers with an unfunded liability, established when the government 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 a contributing member, may file an application for a refund of their contributions. By state law, refunds to members include interest (currently 4%) 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, 2017, there were 1,681 participating fire and rescue units.

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 and survivor benefits. The present retirement benefit is \$170 per month. Plan members are eligible to receive the monthly 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. 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 for members was added effective June 1, 2016 and provides that beneficiaries will receive the same benefit the deceased member would have received beginning when the deceased would have reached age 55.

Contributions. Contribution provisions are established by General Statute 58-86 and may be amended only by the North Carolina General Assembly. Plan member benefits and administrative expenses are funded by a \$10 monthly contribution by the member, investment income and an actuarially based state appropriation. Actual contributions are reported in Section F of this note.

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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, 2017, there were 101 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. when the benefit amount is combined with the individual's maximum retirement allowance upon retirement under the Local Governmental Employees' Retirement System or equivalent locally sponsored retirement plan, 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); or
 - b. one thousand five hundred dollars (\$1,500).

Because of the statutory limits noted above, not all contributions available for benefits are distributed.

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 this year and in the foreseeable future is zero. Registers of Deeds do not contribute.

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 General Statute 135-58 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 full 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 partial 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. Survivor benefits are available to 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.

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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 recommended by the actuary. The State's contractually required contribution for the year ended June 30, 2017 was 29.46% of covered payroll. This was equal to the actuarially determined contribution. This amount, combined with member contributions and investment income fund the benefits earned by plan members during the year and administrative expenses. Actual contributions are reported in Section F of this note.

Refund of contributions. Members who have terminated service as a contributing member may file an application for a refund of their contributions. By state law, refunds to members include interest (currently 4%) 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 General Statute 120-4.21 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 full retirement benefits at age 65 after five years of service. Plan members are eligible to retire with partial retirement benefits at age 60 after five years of service or at age 50 with 20 years of service. 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 service, the surviving beneficiary may choose to receive a lifetime monthly benefit instead of a return of contributions with interest.

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 actuary. For the fiscal year ended June 30, 2017, the State's contractually required contribution was 18.22% of covered payroll. This was equal to the actuarially determined contribution. This amount, combined with member contributions and investment income fund the benefits earned by plan members during the year and administrative expenses. Actual contributions are reported in Section F of this note.

Refunds of contributions. Members who have terminated service as a contributing member may file an application for a refund of their contributions. By state law, refunds to members include interest (currently 4%) 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.

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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.

Contributions. Contribution provisions are established by General Statute 127A-40 and may be amended only by the North Carolina General Assembly. Plan member benefits and administrative expenses are funded by investment income and an actuarially determined state appropriation. NGPF members do not contribute. Actual contributions are reported in Section F of this note.

Defined Contribution Plans

8. SHERIFFS' SUPPLEMENTAL PENSION FUND

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, 2017, there were 96 sheriffs and three beneficiaries enrolled in the plan with 81 of the State's 100 counties participating.

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.

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. Sheriffs do not contribute to the plan. For the fiscal year ended June 30, 2017, the Clerks remitted \$834 thousand. 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.

9. 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 401(k) Plan) in accordance with Internal Revenue Code (IRC) Section 401(k). Effective July 1, 2008, the Board of Trustees of the North Carolina Public Employee Deferred Compensation Plan was consolidated with the Supplemental Retirement Income Plan's Board to form the North Carolina Supplemental Retirement Board of Trustees (the Board). At that time, the Board began administering these independent plans. 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, as well as law enforcement officers as defined under North Carolina General Statutes 143-166.30 and 143-166.50, are eligible to enroll in the 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 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 401(k) Plan are the responsibility of the participants. All contributions are immediately vested in the name of each participant. At December 31, 2016, there were approximately 245,500 employees enrolled with 1,036 participating employers. Benefit and contribution provisions are established by State and Federal law and the plan document.

The 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. Members of the 401(k) Plan may receive their benefits upon retirement, disability, termination, hardship, or death. Participants may choose from several options, including systematic withdrawals, full or partial lump-sum withdrawals, or transfer of their balance to an eligible employer-sponsored retirement plan or IRA.

The Board has delegated the general administration of the Plan to a third party but has retained all statutory authority and fiduciary responsibility for oversight and major decisions of the 401(k) Plan. Financial statements are based on the Plan's fiscal year. The audited statements for the year ended December 31, 2016, are presented in this financial report as a pension and other employee benefit trust fund. The 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. Prudential Retirement Insurance and Annuity Company (Prudential) provides third

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party administration of the 401(k) Plan. The 401(k) Plan's financial statements are available by contacting the N.C. Department of State Treasurer, 3200 Atlantic Avenue, Raleigh, NC 27604-1668.

In addition to the voluntary contribution criteria above, General Statute 143-166.30 and 143-166.50 requires employer contributions to the 401(k) Plan to provide benefits for all law enforcement officers employed by the 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 \$.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. All contributions are immediately vested in the name of each participant. At December 31, 2016, 52 state agencies and component units along with 453 local governmental units outside our reporting entity contributed the required 5%. In addition, 10 state agencies and 472 local government employers contributed to the 401(k) Plan on a voluntary basis. There were approximately 13,900 LEOs actively contributing to the 401(k) Plan and approximately 24,900 LEOs receiving employer contributions as of December 31, 2016.

The 401(k) Plan reported total member contributions of \$325.848 million. The payrolls for law enforcement officers, on which the required contributions were based for the year ended December 31, 2016, amounted to \$166.3 million for the State, \$27.23 million for universities, and \$7.06 million for community colleges, public schools and other miscellaneous component units. The required 5% employer's contribution was made by the State for \$8.31 million, by universities for \$1.36 million, and by the remaining component units, public schools and community colleges for \$353 thousand. In addition, the State contributed \$342 thousand for required court cost assessments. The amount of pension expense recognized in the current fiscal year is equal to the employer contributions.

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

10. 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, 2017, the plan had 20,163 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 \$121.62 million for the fiscal year ended June 30, 2017. Annual covered payroll was \$1.78 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 \$106.69 million for the fiscal year ended June 30, 2017. The amount of pension expense recognized in the current fiscal year related to ORP was \$117.09 million. Forfeitures reduced the universities' pension expense by \$4.53 million for the fiscal year ended June 30, 2017. Any liabilities reported by the universities are immaterial to this CAFR.

NOTES TO THE FINANCIAL STATEMENTS**C. Plan Membership**

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

	Cost-Sharing, Multiple-Employer				Single-Employer		
	Teachers' and State Employees'	Local Governmental	Firefighters' and Rescue Squad	Registers of Deeds'	Consolidated Judicial	Legislative	North Carolina National Guard
Inactive plan members or beneficiaries currently receiving benefits	208,443	65,930	13,940	103	654	293	4,541
Inactive plan members entitled to but not yet receiving benefits	151,581	63,682	139	-	42	91	5,538
Active plan members	312,490	126,647	42,445	100	560	170	5,953
	<u>672,514</u>	<u>256,259</u>	<u>56,524</u>	<u>203</u>	<u>1,256</u>	<u>554</u>	<u>16,032</u>
Valuation date	12-31-16	12-31-16	12-31-16	12-31-16	12-31-16	12-31-16	12-31-16

D. Investments

Investment policy. The pension plans' policy in regard to 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, 2017.

Asset Class	Target Allocation
Fixed Income	29%
Global Equity	42%
Real Estate	8%
Alternatives	8%
Opportunistic Fixed Income	7%
Inflation Sensitive	6%
Total	<u>100%</u>

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, 2017, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expense was:

	Cost-Sharing, Multiple-Employer				Single-Employer		
	Teachers' and State Employees'	Local Governmental	Firefighters' and Rescue Squad	Registers of Deeds'	Consolidated Judicial	Legislative	North Carolina National Guard
Money-weighted Rate of Return	10.75%	10.74%	10.76%	(0.03%)	10.75%	10.72%	10.63%

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

NOTES TO THE FINANCIAL STATEMENTS**E. Net Pension Liability of Participating Employers**

The components of the net pension liability of the participating employers at June 30, 2017, were as follows (dollars in thousands):

	Cost-Sharing, Multiple-Employer				Single-Employer		
	Teachers' and State Employees'	Local Governmental	Firefighters' and Rescue Squad	Registers of Deeds'	Consolidated Judicial	Legislative	North Carolina National Guard
Total pension liability	\$ 75,639,901	\$ 26,230,733	\$ 455,675	\$ 31,743	\$ 651,830	\$ 29,410	\$ 174,972
Plan fiduciary net position	67,705,460	24,703,010	407,163	48,812	569,103	27,689	121,127
Net pension liability (asset)	<u>\$ 7,934,441</u>	<u>\$ 1,527,723</u>	<u>\$ 48,512</u>	<u>\$ (17,069)</u>	<u>\$ 82,727</u>	<u>\$ 1,721</u>	<u>\$ 53,845</u>
Plan fiduciary net position as a percentage of the total pension liability	89.51%	94.18%	89.35%	153.77%	87.31%	94.15%	69.23%

Actuarial assumptions. The total pension liability was determined by actuarial valuations as of December 31, 2016, 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, 2017 utilizing update procedures incorporating the actuarial assumptions.

	Cost-Sharing, Multiple-Employer				Single-Employer		
	Teachers' and State Employees'	Local Governmental	Firefighters' and Rescue Squad	Registers of Deeds'	Consolidated Judicial	Legislative	North Carolina National Guard
	(1)	(1)		(1)	(1)	(1)	
Valuation date	12/31/16	12/31/16	12/31/16	12/31/16	12/31/16	12/31/16	12/31/16
Inflation	3%	3%	3.5%	3%	3%	3%	3%
Salary Increases	3.50% - 8.10%	3.50% - 7.75%	N/A	3.50% - 7.75%	3.50% - 5.50%	5.50%	N/A
Investment Rate of Return (2)	7.20%	7.20%	7.20%	3.75%	7.20%	7.20%	7.20%

(1) - Salary increases include 3.5% inflation and productivity factor

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

N/A - Not Applicable

During the fiscal year ended June 30, 2017, retirees in the TSERS, CJRS, and LRS whose retirement began on or before September 1, 2016 received a one-time pension supplement payment equal to 1.6% of the retiree's annual retirement allowance as of September 1, 2016. Retirees in the LGERS received a 0.105% cost-of-living (COLA) adjustment for the fiscal year ended June 30, 2017. 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 1.0% cost-of-living adjustment. Retirees and beneficiaries of retirees with retirement effective dates between August 1, 2016 and June 1, 2017 received a prorated amount. These benefit enhancements reflect legislation enacted by the North Carolina General Assembly. These enhancements were reflected as liabilities in the valuations described above.

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. population. The mortality rates also contain a provision to reflect future mortality improvements. The actuarial assumptions used in the December 31, 2016 valuations were based on the results of an actuarial experience review for the period January 1, 2010 through December 31, 2014.

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

NOTES TO THE FINANCIAL STATEMENTS

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, 2017 (see the discussion of the pension plan's investment policy in Section D) are summarized in the following table:

<u>Asset Class</u>	<u>Long-Term Expected Real Rate of Return</u>
Fixed Income	1.4%
Global Equity	5.3%
Real Estate	4.3%
Alternatives	8.9%
Opportunistic Fixed Income	6.0%
Inflation Sensitive	4.0%

The information in the preceding table is based on 30 year expectations developed with the consulting actuary 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 3.05%. 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, 2017 is 1.3%.

Discount rate. The discount rate used to measure the total pension liability was 7.20% except for Registers of Deeds' Supplemental Pension Fund which was 3.75%. The discount rate for 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 was lowered from 7.25% to 7.20% for the December 31, 2016 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, 2017 calculated using the discount rate of 7.20% (3.75% 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 (6.20%; RODSPF 2.75%) or 1-percentage-point higher (8.20%; RODSPF 4.75%) than the current rate (dollars in thousands):

	<u>1% Decrease (6.20%)</u>	<u>Current Discount Rate (7.20%)</u>	<u>1% Increase (8.20%)</u>
<u>Cost-Sharing, Multiple-Employer</u>			
TSERS' net pension liability	\$ 16,332,364	\$ 7,934,441	\$ 898,052
LGERS' net pension liability (asset)	4,586,259	1,527,723	(1,025,189)
FRSWPF' net pension liability	105,209	48,512	1,908
<u>Single-Employer</u>			
CJRS' net pension liability	\$ 149,016	\$ 82,727	\$ 25,987
LRS' net pension liability (asset)	4,372	1,721	(559)
NCNGs' net pension liability	75,110	53,845	36,354
	<u>1% Decrease (2.75%)</u>	<u>Current Discount Rate (3.75%)</u>	<u>1% Increase (4.75%)</u>
<u>Cost-Sharing, Multiple-Employer</u>			
RODs' net pension asset	\$ (13,416)	\$ (17,069)	\$ (20,141)

NOTES TO THE FINANCIAL STATEMENTS**F. GASB Statement 68 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, 2017 (dollars in thousands):

	Teachers' and State Employees'	Firefighters' and Rescue Squad	Consolidated Judicial	Legislative	North Carolina National Guard	Total
Primary Government	\$ 325,836	\$ 17,602	\$ 19,592	\$ 675	\$ 8,517	\$ 372,222
Component Units						
University of North Carolina System	\$ 219,780	\$ —	\$ —	\$ —	\$ —	\$ 219,780
Community Colleges	89,417	—	—	—	—	89,417
Other Component Units	2,710	—	—	—	—	2,710
Total Contributions	<u>\$ 637,743</u>	<u>\$ 17,602</u>	<u>\$ 19,592</u>	<u>\$ 675</u>	<u>\$ 8,517</u>	<u>\$ 684,129</u>

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

As of June 30, 2017, the primary government and component units reported net pension liabilities for defined benefit pension plans administered by the State as follows (dollars in thousands):

	Primary Government	Component Units		
		University of North Carolina System ⁽¹⁾	Community Colleges	Other Component Units ⁽²⁾
Proportionate Share of the Net Pension Liability				
Teachers' and State Employees' Retirement System	\$ 2,015,414	\$ 1,325,896	\$ 543,846	\$ 14,653
Net Pension Liability				
Firefighters' and Rescue Squad	66,819	—	—	—
Consolidated Judicial	95,402	—	—	—
Legislative Retirement	2,233	—	—	—
North Carolina National Guard	59,381	—	—	—
Total Net Pension Liability	<u>\$ 2,239,249</u>	<u>\$ 1,325,896</u>	<u>\$ 543,846</u>	<u>\$ 14,653</u>

(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, 2017, Rex Healthcare had a net pension liability of \$115.925 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. The net pension liability of Centennial Authority's retirement plan is excluded from the above amounts. At June 30, 2017, Centennial Authority had a net pension liability of \$85 thousand.

Each net pension liability was measured as of June 30, 2016, and the total pension liability used to calculate each net pension liability was determined by an actuarial valuation as of December 31, 2015. Update procedures were used to roll forward the total pension liability to June 30, 2016. 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.

NOTES TO THE FINANCIAL STATEMENTS

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, 2016 and 2015 were as follows:

	Primary Government	Component Units		
		University of North Carolina System	Community Colleges	Other Component Units
Teachers' and State Employees' Retirement System				
Proportion – June 30, 2016	21.93%	14.43%	5.92%	0.16%
Proportion – June 30, 2015	22.47%	14.45%	5.89%	0.17%
Change – Increase (Decrease)	(0.54)	(0.02)	0.03	(0.01)

For the year ended June 30, 2017, the primary government and component units recognized pension expense for defined benefit pension plans administered by the State as follows (dollars in thousands):

	Primary Government	Component Units		
		University of North Carolina System	Community Colleges	Other Component Units
Pension Expense				
Teachers' and State Employees' Retirement System	\$ 387,346	\$ 258,486	\$ 107,872	\$ 2,826
Consolidated Judicial	20,828	–	–	–
Legislative	2,554	–	–	–
Total Pension Expense	<u>\$ 410,728</u>	<u>\$ 258,486</u>	<u>\$ 107,872</u>	<u>\$ 2,826</u>

As a result of its requirement to contribute, the primary government recognized expense of \$10.67 million for FRSWPF and \$11.1 million for NGPF for the year ended June 30, 2017. 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, 2016 and 2015.

NOTES TO THE FINANCIAL STATEMENTS

At June 30, 2017, the primary government and component units reported deferred outflows of resources related to defined benefit pension plans administered by the State from the following sources (dollars in thousands):

	Deferred Outflows of Resources					Total
	Teachers' and State Employees'	Firefighters' and Rescue Squad	Consolidated Judicial	Legislative	North Carolina National Guard	
Primary Government:						
Difference between actual and expected experience	\$ —	\$ 1,946	\$ —	\$ —	\$ 17	\$ 1,963
Changes of assumptions	297,220	11,971	21,302	2,799	8,356	341,648
Net difference between projected and actual earnings on pension plan investments	718,750	19,557	27,440	1,381	5,727	772,855
Change in proportion and differences between agency's contributions and proportionate share of contributions	27,629	—	—	—	—	27,629
Contributions subsequent to the measurement date	325,836	17,602	19,592	675	8,517	372,222
Total	\$ 1,369,435	\$ 51,076	\$ 68,334	\$ 4,855	\$ 22,617	\$ 1,516,317
Component Units:						
University of North Carolina System						
Changes of assumptions	\$ 195,537					
Net difference between projected and actual earnings on pension plan investments	472,857					
Change in proportion and differences between agency's contributions and proportionate share of contributions	20,498					
Contributions subsequent to the measurement date	219,780					
Total ⁽¹⁾	\$ 908,672					
Community Colleges						
Changes of assumptions	\$ 80,204					
Net difference between projected and actual earnings on pension plan investments	193,953					
Change in proportion and differences between agency's contributions and proportionate share of contributions	13,999					
Contributions subsequent to the measurement date	89,417					
Total	\$ 377,573					
Other Component Units						
Changes of assumptions	\$ 2,161					
Net difference between projected and actual earnings on pension plan investments	5,225					
Change in proportion and differences between agency's contributions and proportionate share of contributions	130					
Contributions subsequent to the measurement date	2,710					
Total ⁽²⁾	\$ 10,226					

(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, 2017, Rex Healthcare had deferred outflows of resources of \$33.630 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, 2017, Centennial Authority had deferred outflows of resources of \$74 thousand.

NOTES TO THE FINANCIAL STATEMENTS

At June 30, 2017, the primary government and component units reported deferred inflows of resources related to defined benefit pension plans administered by the State from the following sources (dollars in thousands):

	Deferred Inflows of Resources					Total
	Teachers' and State Employees'	Firefighters' and Rescue Squad	Consolidated Judicial	Legislative	North Carolina National Guard	
Primary Government:						
Difference between actual and expected experience	\$ 95,251	\$ 3,876	\$ 5,756	\$ 372	\$ 44	\$ 105,299
Changes of assumptions	—	11,969	—	—	—	11,969
Net difference between projected and actual earnings on pension plan investments	3	—	—	—	—	3
Change in proportion and differences between agency's contributions and proportionate share of contributions	25,905	—	—	—	—	25,905
Total	<u>\$ 121,159</u>	<u>\$ 15,845</u>	<u>\$ 5,756</u>	<u>\$ 372</u>	<u>\$ 44</u>	<u>\$ 143,176</u>
Component Units:						
University of North Carolina System						
Difference between actual and expected experience	\$ 62,664					
Change in proportion and differences between agency's contributions and proportionate share of contributions	11,345					
Total⁽¹⁾	<u>\$ 74,009</u>					
Community Colleges						
Difference between actual and expected experience	\$ 25,703					
Change in proportion and differences between agency's contributions and proportionate share of contributions	4,954					
Total	<u>\$ 30,657</u>					
Other Component Units						
Difference between actual and expected experience	\$ 692					
Change in proportion and differences between agency's contributions and proportionate share of contributions	141					
Total⁽²⁾	<u>\$ 833</u>					

(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, 2017, Rex Healthcare had deferred inflows of resources of \$7.255 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, 2017, Centennial Authority had deferred inflows of resources of \$4 thousand.

NOTES TO THE FINANCIAL STATEMENTS

Amounts reported as deferred outflows of resources related to contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the year ended June 30, 2018. 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'

Year Ending June 30	Component Units			
	Primary Government	University of North Carolina System	Community Colleges	Other Component Units
2018	\$ 154,410	\$ 105,245	\$ 45,017	\$ 1,132
2019	157,417	106,336	45,544	1,148
2020	391,035	257,771	107,159	2,820
2021	219,579	145,531	59,779	1,583

Other Plans

Year Ending June 30	Primary Government			
	Firefighters' and Rescue Squad	Consolidated Judicial	Legislative	North Carolina National Guard
2018	\$ 4,414	\$ 7,614	\$ 2,212	\$ 7,664
2019	4,416	7,641	587	2,469
2020	10,249	16,254	648	2,503
2021	4,316	11,343	361	1,420
2022	(1,615)	133		
Thereafter	(4,151)			

Actuarial assumptions. The total pension liability in the December 31, 2015 actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement:

	Teachers' and State Employees'	Firefighters' and Rescue Squad	Consolidated Judicial	Legislative	North Carolina National Guard
	(1)		(1)	(1)	
Valuation date	12/31/15	12/31/15	12/31/15	12/31/15	12/31/15
Inflation	3%	3.5%	3%	3%	3%
Salary Increases	3.50% - 8.10%	N/A	3.50% - 5.50%	5.50%	N/A
Investment Rate of Return (2)	7.25%	7.25%	7.25%	7.25%	7.25%

(1) - Salary increases include 3.5% inflation and productivity factor

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

N/A - Not Applicable

NOTES TO THE FINANCIAL STATEMENTS

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, 2016:

<u>Asset Class</u>	<u>Target Allocation</u>	<u>Long-Term Expected Real Rate of Return</u>
Fixed Income	29%	1.4%
Global Equity	42%	5.3%
Real Estate	8%	4.3%
Alternatives	8%	8.9%
Opportunistic Fixed Income	7%	6.0%
Inflation Sensitive	6%	4.0%
Total	100%	

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 7.25%, 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 (6.25%) or 1-percentage-point higher (8.25%) than the current rate (dollars in thousands):

	<u>Net Pension Liability</u>		
	<u>1% Decrease (6.25%)</u>	<u>Current Discount Rate (7.25%)</u>	<u>1% Increase (8.25%)</u>
Teachers' and State Employees' Proportionate Share			
Primary Government	\$ 3,790,603	\$ 2,015,413	\$ 522,722
University of North Carolina System	2,493,754	1,325,896	343,887
Community Colleges	1,022,870	543,846	141,053
Other Component Units	27,560	14,653	3,801
Firefighters' and Rescue Squad	\$ 122,146	\$ 66,819	\$ 21,335
Consolidated Judicial	\$ 158,863	\$ 95,402	\$ 41,098
Legislative	\$ 4,827	\$ 2,233	\$ 5,000
North Carolina National Guard	\$ 80,176	\$ 59,381	\$ 42,267

NOTES TO THE FINANCIAL STATEMENTS**3. CHANGES IN NET PENSION LIABILITY (ASSET) FOR SINGLE-EMPLOYER, DEFINED-BENEFIT PLANS**

The following schedule presents the changes in the net pension liability for the single-employer, defined-benefit plans as of June 30, 2017 (dollars in thousands):

	<u>Consolidated Judicial</u>	<u>Legislative</u>
Total pension liability		
Service Cost	\$ 16,904	\$ 822
Interest	42,009	1,708
Changes of benefit terms	332	22
Differences between expected and actual experience	(4,295)	(520)
Changes of assumptions	26,588	5,151
Benefit payments, including refunds of member contributions	(40,462)	(2,430)
Net change in total pension liability	<u>41,076</u>	<u>4,753</u>
Total pension liability - beginning (a)	582,766	23,952
Total pension liability - ending (c)	<u>\$ 623,842</u>	<u>\$ 28,705</u>
Plan fiduciary net position		
Contributions-employer	\$ 18,908	\$ 65
Contributions-member	7,561	253
Net investment income	3,972	181
Benefit payments, including refunds of member contributions	(40,462)	(2,430)
Administrative expense	(73)	(53)
Net change in plan fiduciary net position	<u>(10,094)</u>	<u>(1,984)</u>
Plan fiduciary net position - beginning (b)	538,534	28,456
Plan fiduciary net position - ending (d)	<u>\$ 528,440</u>	<u>\$ 26,472</u>
Net pension liability (asset) - beginning (a) - (b)	44,232	(4,504)
Net pension liability - ending (c) - (d)	<u>\$ 95,402</u>	<u>\$ 2,233</u>

G. GASB Statement 73 Reporting**1. SPECIAL SEPARATION AND 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.

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.

NOTES TO THE FINANCIAL STATEMENTS

Plan membership. The following table summarizes membership information at the actuarial valuation date of December 31, 2015:

	Special Separation Allowance
Inactive plan members or beneficiaries currently receiving benefits	874
Active plan members	2,782
	<u>3,656</u>

Total pension liability. As of June 30, 2017, the primary government reported a pension liability of \$198.653 million. The primary government's pension liability was measured as of June 30, 2016. The total pension liability was determined by an actuarial valuation as of December 31, 2015. Update procedures were used to roll forward the total pension liability to June 30, 2016.

Actuarial Assumptions. The actuarial assumptions used to measure the total pension liability of the SSA are the same as the actuarial valuation assumptions used for the TSERS and are described in Section E above. Mortality rates are based on the same mortality tables used for the TSERS as described in Section E above. The inflation rate for both general and wage inflation was 3% at June 30, 2016.

The withdrawal rates, retirement rates, mortality assumption, annual rate of salary increase, and leave conversion assumption were changed to align with the latest assumptions that were adopted for use with the December 31, 2015 actuarial valuation of TSERS, based on the experience study prepared as of December 31, 2014 and adopted by the TSERS Board of Trustees on January 21, 2016.

Discount Rate. The discount rate used to measure the total pension liability was 2.71% at June 30, 2016. The economic assumptions used for the discount rate are based on the yield of the S&P Municipal Bond 20 Year High Grade Rate Index as of the measurement date. The discount rate was updated from 3.73% at June 30, 2015 to 2.71% at June 30, 2016.

Pension expense and deferred outflows of resources and deferred inflows of resources related to pensions. As of June 30, 2017, the primary government recognized pension expense for SSA of \$13.893 million.

At June 30, 2017, the primary government reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources (dollars in thousands):

	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference between actual and expected experience	\$ 3,250	\$ —
Changes of assumptions	—	1,006
Transactions subsequent to the measurement date	15,626	—
Total	<u>\$ 18,876</u>	<u>\$ 1,006</u>

The \$15.626 million reported as deferred outflows of resources related to transactions subsequent to the measurement date will be recognized as a reduction of the pension liability in the year ended June 30, 2018. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows (dollars in thousands):

Year Ending June 30	Special Separation Allowance
2018	\$ 467
2019	467
2020	467
2021	467
2022	376

NOTES TO THE FINANCIAL STATEMENTS

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 2.71%, as well as what the total pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (1.71%) or 1-percentage-point higher (3.71%) than the current rate (dollars in thousands):

	<u>Total Pension Liability</u>		
	<u>1% Decrease (1.71%)</u>	<u>Current Discount Rate (2.71%)</u>	<u>1% Increase (3.71%)</u>
Special Separation Allowance	\$ 212,781	\$ 198,653	\$ 185,634

Changes in the total pension liability. The following schedule presents the changes in the total pension liability for the Special Separation Allowance plan as of June 30, 2017 (dollars in thousands):

	<u>Special Separation Allowance</u>
Total pension liability	
Service Cost	\$ 6,112
Interest	7,314
Differences between expected and actual experience	3,927
Change of assumptions	(1,216)
Benefit payments, including refunds of member contributions	<u>(14,895)</u>
Net change in total pension liability	1,242
Total pension liability - beginning	<u>197,411</u>
Total pension liability - ending	<u><u>\$ 198,653</u></u>