

**TENNESSEE CONSOLIDATED RETIREMENT SYSTEM**  
**BOARD OF TRUSTEES MEETING**  
**NOVEMBER 30, 2017**

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**TENNESSEE CONSOLIDATED RETIREMENT SYSTEM  
BOARD OF TRUSTEES MEETING  
NOVEMBER 17, 2017**

**TABLE OF CONTENTS**

Minutes of the Board of Trustees .....	3
Committee Minutes	
Administrative Committee.....	9
Audit Committee .....	11
Investment Committee.....	15
Political Subdivision Seeking Membership	
Henderson County Emergency Communications District.....	23
Tullahoma City Board of Education.....	31
Statistical Reports	
Active Member Statistics .....	39
Retired Payroll Statistics .....	40
Refund Activity and Expenditures .....	42
Prior Service Activity .....	44
Disability Retirement Report	
Disability Statistical Report .....	49
Approved for Disability .....	51
Disapproved for Disability .....	57
TCRS Financial Report .....	63

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**POLITICAL SUBDIVISIONS  
SEEKING MEMBERSHIP**

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**Political Subdivisions Beginning Participation  
in the Tennessee Consolidated Retirement System  
January 1, 2018**

Political Subdivision	Amount of Service Employer	Employee	ER Rate	EE Rate	Accrued Liability	Part Time Coverage	Cost of Living	Number of Employees
Henderson County Emergency Communications District	0	0	3.14%	5.00%	\$0	Excluded	Excluded	1
Regular Defined Benefit Plan								

**Meetings:**

- January 2017      Explained initial employer costs and participating procedures to the governing body.
- January 2018      Will explain reporting procedures to payroll officer(s).

**Additional Notes:**

1. Henderson County Emergency Communications District (ECD) was being erroneously reported by Henderson County. As of January 1, 2018, Henderson County ECD will be a separate entity in the TCRS system.
2. Henderson County ECD initial employer contribution rate of 3.14% is the same rate at Henderson County.

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Tennessee Consolidated  
Retirement System  
Henderson County Emergency  
Communications District

A RESOLUTION to authorize a political subdivision's participation in the Tennessee Consolidated Retirement System in accordance with Tennessee Code Annotated, Title 8, Chapters 34 – 37.

WHEREAS, Tennessee Code Annotated, Title 8, Chapter 35, Part 2 allows a political subdivision to participate in the Tennessee Consolidated Retirement System ("TCRS") subject to the approval of the TCRS Board of Trustees; and

WHEREAS, the Henderson County Emergency Communications District desires to participate in TCRS under the provisions of Tennessee Code Annotated, Title 8, Chapters 34 – 37 and in accordance with the following terms and conditions:

- A. TYPE PLAN. The Political Subdivision adopts the following type plan: Regular Defined Benefit Plan;
- B. EMPLOYEE CONTRIBUTIONS. The Employees shall contribute: 5% of the employees' earnable compensation;
- C. COST-OF-LIVING INCREASES FOR RETIREES. The Political Subdivision shall: NOT provide cost-of-living increases for its retirees;
- D. ELIGIBILITY OF PART-TIME EMPLOYEES. The Political Subdivision shall: NOT allow it's part-time employees to participate in TCRS;
- E. PRIOR SERVICE. For each employee employed with the Political Subdivision on the effective date of the Political Subdivision's participation in TCRS, the Political Subdivision shall: NOT allow its employees to establish any prior service credit with the Political Subdivision; and

WHEREAS, the liability for participation and costs of administration as of January 1, 2018 shall be the sole responsibility of the Political Subdivision and not the State of Tennessee; and

WHEREAS, the Political Subdivision has passed a budget amendment appropriating the funds necessary to meet such liability and the same is attached hereto; and

WHEREAS, the Political Subdivision has agreed to comply with a separate resolution addressing liabilities and assets prior to January 1, 2018 and acknowledges that compliance by the other party to the resolution is required for participation; and

WHEREAS, the effective date of participation shall be on January 1, 2018 or on such later date as determined by the TCRS Board of Trustees, and the initial employer contribution rate shall be 3.14%, which is based on the estimated lump sum accrued liability of \$ 0.00.

NOW, THEREFORE, BE IT RESOLVED That the Board of Directors of the Henderson County Emergency Communications District hereby authorizes all its employees in all its departments or instrumentalities to become eligible to participate in TCRS in accordance with the above terms and conditions subject to the approval of the TCRS Board of Trustees. It is acknowledged and understood that pursuant to Tennessee Code Annotated, Section 8-35-111 the Political Subdivision shall not make employer contributions to any other retirement or deferred compensation plans on behalf of any employee who participates in TCRS pursuant to this Resolution wherein the total combined employer contributions to such plans exceed 3% of the employee's salary, unless the Local Government Hybrid Plan or the State Employee and Teacher Hybrid Plan is adopted by the Political Subdivision for such employee. If either the Local Government Hybrid Plan or the State Employee and Teacher Hybrid Plan is adopted by the

Political Subdivision, the Political Subdivision may make employer contributions to the defined contribution plan component of that Plan and to any one or more additional tax deferred compensation or retirement plans on behalf of such employee provided that the total combined employer contributions to such plans on behalf of the employee does not exceed 7% of the employee's salary.

STATE OF TENNESSEE  
COUNTY OF Henderson

I, Allan Maness, clerk of the Board of the Board of Directors of the Henderson County Emergency Communications District of Henderson County, Tennessee, do hereby certify that this is a true and exact copy of the foregoing Resolution that was approved and adopted in accordance with applicable law at a meeting held on the 20<sup>th</sup> day of July, 2017, the original of which is on file in this office.

IN WITNESS WHEREOF, I have hereunto set my hand, and the seal of the Henderson County Emergency Communications District.

Allan Man  
As Clerk of the Board, as aforesaid

Seal

Resolution  
1010-17C

Tennessee Consolidated  
Retirement System  
Henderson County and  
Henderson County Emergency Communications District

A RESOLUTION to acknowledge and agree  
to certain terms and conditions regarding  
participation in the Tennessee Consolidated  
Retirement System

WHEREAS, Tennessee Code Annotated, Title 8, Chapter 35, Part 2 allows a political subdivision to participate in the Tennessee Consolidated Retirement System ("TCRS") subject to approval of the TCRS Board of Trustees; and

WHEREAS, HENDERSON COUNTY is a participating political subdivision in TCRS under the provisions of Tennessee Code Annotated, Title 8, Chapters 34-37; and

WHEREAS, the HENDERSON COUNTY EMERGENCY COMMUNICATIONS DISTRICT is a political subdivision with a relationship to HENDERSON COUNTY and its employees participate in TCRS through HENDERSON COUNTY under the same terms and conditions as all employees of HENDERSON COUNTY participate; and

WHEREAS, TCRS has determined that the HENDERSON COUNTY EMERGENCY COMMUNICATIONS DISTRICT is required to join TCRS as a separate participating political subdivision and to report its employees separately from HENDERSON COUNTY; and

WHEREAS, TCRS has determined that the reporting of the HENDERSON COUNTY EMERGENCY COMMUNICATIONS DISTRICT employees by HENDERSON COUNTY was an administrative error; and

WHEREAS, TCRS will authorize the employees of the HENDERSON COUNTY EMERGENCY COMMUNICATIONS DISTRICT to continue to participate in TCRS under the following terms and conditions:

- A. The HENDERSON COUNTY EMERGENCY COMMUNICATIONS DISTRICT establishes, to the satisfaction of TCRS, its status as a governmental entity.
- B. The BOARD OF DIRECTORS of the HENDERSON COUNTY EMERGENCY COMMUNICATIONS DISTRICT passes a resolution to participate in TCRS pursuant to Tennessee Code Annotated, Title 8, Chapter 35, Part 2 and agrees to all terms thereof.
- C. The BOARD OF DIRECTORS of the HENDERSON COUNTY EMERGENCY COMMUNICATIONS DISTRICT agrees, by passage of this resolution, that all employees hired prior to January 1, 2018, shall participate in TCRS under the same terms and conditions under which they currently participate as reported by HENDERSON COUNTY and accepts all liabilities established January 1, 2018, or later, associated with such participation.
- D. The BOARD OF DIRECTORS of the HENDERSON COUNTY EMERGENCY COMMUNICATIONS DISTRICT agrees, by passage of this resolution, to maintain and accept all assets and liabilities established January 1, 2018, or later, associated with membership of its current and future employees in TCRS.
- E. The COUNTY COMMISSION of HENDERSON COUNTY agrees, by passage of this resolution, to maintain and accept all assets and liabilities established in regard to current and former employees of the HENDERSON COUNTY EMERGENCY COMMUNICATIONS DISTRICT prior to January 1, 2018.
- F. The BOARD OF DIRECTORS of the HENDERSON COUNTY EMERGENCY COMMUNICATIONS DISTRICT, by passage of this resolution, hereby rescinds any and all previously adopted resolutions addressing its participation in TCRS.

G. The COUNTY COMMISSION of the HENDERSON COUNTY, by passage of this resolution, hereby rescinds any and all previously adopted resolutions addressing participation of the HENDERSON COUNTY EMERGENCY COMMUNICATIONS DISTRICT in TCRS.

NOW, THEREFORE, BE IT RESOLVED that the BOARD OF DIRECTORS of the HENDERSON COUNTY EMERGENCY COMMUNICATIONS DISTRICT and the COUNTY COMMISSION of the HENDERSON COUNTY hereby agree to compliance with the terms and conditions set forth above in order to authorize the employees of the HENDERSON COUNTY EMERGENCY COMMUNICATIONS DISTRICT to be eligible to continue participation in TCRS. It is acknowledged and understood that TCRS is authorizing the employees of the HENDERSON COUNTY EMERGENCY COMMUNICATIONS DISTRICT to participate in TCRS by compliance of the governing bodies of the HENDERSON COUNTY EMERGENCY COMMUNICATIONS DISTRICT and the HENDERSON COUNTY with the terms and conditions above, and such authorization from TCRS is contingent upon such compliance.

STATE OF TENNESSEE

COUNTY OF Henderson

I, Allan Maness, clerk of the BOARD OF

DIRECTORS of the HENDERSON COUNTY EMERGENCY COMMUNICATIONS DISTRICT of HENDERSON, Tennessee, do hereby certify that this is a true and exact copy of the foregoing Resolution that was approved and adopted in accordance with applicable law at a meeting held on the 20<sup>th</sup> day of July, 2017, the original of which is on file in this office.

IN WITNESS WHEREOF, I have hereunto set my hand, and the seal of the HENDERSON COUNTY EMERGENCY COMMUNICATIONS DISTRICT.

All Maness  
As Clerk of the Board, as aforesaid

Seal

STATE OF TENNESSEE

COUNTY OF Henderson

I, Carolyn Holmes, clerk of the COUNTY

COMMISSION of HENDERSON COUNTY, Tennessee, do hereby certify that this is a true and exact copy of the foregoing Resolution that was approved and adopted in accordance with applicable law at a meeting held on the 10 day of October, 2017, the original of which is on file in this office.

IN WITNESS WHEREOF, I have hereunto set my hand, and the seal of the HENDERSON COUNTY.

Carolyn Helms  
As Clerk of the Board, as aforesaid

Seal



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**Political Subdivisions Beginning Participation  
in the Tennessee Consolidated Retirement System  
January 1, 2018**

Political Subdivision	Amount of Service Employer	Employee	ER Rate	EE Rate	Accrued Liability	Part Time Coverage	Cost of Living	Number of Employees
Tulahoma City Board of Education	0	0	4.00%	5.00%	\$0	Exclude	Include	190
Local Government Hybrid Plan with Cost Controls								

**Meetings:**

August 2017 Outreach staff explained initial employer costs and participating procedures to the governing body  
January 2018 Will explain reporting procedures to payroll officer(s).

**Additional Note:**

The Board of Education will be participating effective January 1, 2018 for prospective hires only.

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**Tennessee Consolidated  
Retirement System**  
(Board of Education )

A RESOLUTION to authorize a local board of education's participation in the Tennessee Consolidated Retirement System in accordance with Tennessee Code Annotated, Title 8, Chapters 34 – 37.

WHEREAS, Tennessee Code Annotated, Title 8, Chapter 35, Part 2 allows a local board of education to participate in the Tennessee Consolidated Retirement System ("TCRS") separately from the political subdivision with which it is associated subject to the approval of the TCRS Board of Trustees and subject to the passage of a resolution by the political subdivision accepting the financial responsibility for the liabilities associated with the board of education's participation in TCRS; and

WHEREAS, the **Tullahoma City Board of Education** desires to participate in TCRS under the  
(Name of Board of Education)

provisions of Tennessee Code Annotated, Title 8, Chapters 34 – 37 and in accordance with the following terms and conditions:

- A. **TYPE PLAN.** (CHECK BOX 1 OR BOX 2 OR BOX 3 OR BOX 4). The Board of Education adopts the following type plan:
- (1)  Regular Defined Benefit Plan.
  - (2)  Alternate Defined Benefit Plan.
  - (3)  Local Government Hybrid Plan (If this Plan is chosen, the Board of Education MUST also maintain a defined contribution plan on behalf of its employees and pass the attached resolution that describes the type of defined contribution plan the Board of Education will adopt. The defined contribution plan could provide for employer contributions of 0% to up to 7% of its employees' salaries).
  - (4)  State Employee and Teacher Hybrid Plan (If this Plan is chosen, the Board of Education MUST also maintain a defined contribution plan on behalf of its employees whereby the Board of Education makes a mandatory employer contribution on behalf of each of its employees participating in the Hybrid Plan equal to 5% of the respective employee's salary subject to the cost controls and unfunded liability controls of the Hybrid Plan. The Board of Education must also pass the attached resolution that describes the type of defined contribution plan the Board of Education will adopt).
- B. **ASSUMPTION OF EMPLOYEE CONTRIBUTIONS.** (CHECK BOX 1 OR BOX 2 OR BOX 3 - IF THE STATE EMPLOYEE AND TEACHER HYBRID PLAN IS SELECTED ABOVE, NO EMPLOYEE CONTRIBUTIONS MAY BE ASSUMED AND BOX 1 MUST BE CHECKED). The Board of Education shall:
- (1)  NOT assume any employee contributions.
  - (2)  ASSUME 2.5% of its employees' contributions.
  - (3)  ASSUME 5.0% of its employees' contributions.
- C. **COST-OF-LIVING INCREASES FOR RETIREES.** (CHECK BOX 1 OR BOX 2 – IF EITHER THE LOCAL GOVERNMENT, OR THE STATE EMPLOYEE AND TEACHER HYBRID PLAN IS SELECTED ABOVE, COST-OF-LIVING INCREASES FOR RETIREES MUST BE GIVEN, SUBJECT TO ANY APPLICABLE COST CONTROLS AND UNFUNDED LIABILITY CONTROLS AND BOX 2 MUST BE CHECKED). The Board of Education shall:
- (1)  NOT provide cost-of-living increases for its retirees.
  - (2)  PROVIDE cost-of-living increases for its retirees.
- D. **ELIGIBILITY OF PART-TIME EMPLOYEES.** (CHECK BOX 1 OR BOX 2). The Board of Education shall:
- (1)  NOT allow its part-time employees to participate in TCRS.

(2) [ ] ALLOW its part-time employees to participate in TCRS.

E. **PRIOR SERVICE.** *(CHECK AND COMPLETE BOX 1 OR BOX 2 OR BOX 3 OR BOX 4 OR BOX 5 – CAUTION: IF THE STATE EMPLOYEE AND TEACHER HYBRID PLAN IS SELECTED ABOVE AND IF BOX 3 BELOW IS NOT CHOSEN, THE EMPLOYER CONTRIBUTION COULD EXCEED 4% THEREBY CAUSING THE COST CONTROLS AND UNFUNDED LIABILITY CONTROLS TO AUTOMATICALLY APPLY. ACCORDINGLY, PRIOR SERVICE IS NOT RECOMMENDED).* For each employee employed with the Board of Education on the effective date of the Board of Education's participation in TCRS, the Board of Education shall:

(1) [ ] Purchase ALL years of prior service credit on behalf of its employees.

(2) [ ] Purchase NO years of prior service credit on behalf of its employees, but shall accept the unfunded liability should its employees establish ALL years of prior service.

(3) [X] NOT allow its employees to establish any prior service credit with the Board of Education.

(4) [ ] Purchase \_\_\_\_\_ years of prior service credit on behalf of its employees and accept the unfunded liability should its employees establish an additional \_\_\_\_\_ years of prior service credit.

(5) [ ] Purchase \_\_\_\_\_ years of prior service credit on behalf of its employees and no additional prior service credit may be established; and

F. **MAXIMUM UNFUNDED LIABILITY.** *(COMPLETE THIS ITEM F ONLY IF THE STATE EMPLOYEE AND TEACHER HYBRID PLAN IS SELECTED ABOVE).* For purposes of the cost control provisions of Tennessee Code Annotated, Section 8-36-922(d), the Board of Education defines "maximum unfunded liability" to mean an unfunded liability of no greater than fifteen percent (15%) of the debt authorized by the state of Tennessee.

WHEREAS, the liability for participation and costs of administration shall be the sole responsibility of the Board of Education and the Political Subdivision with which it is associated, and not the State of Tennessee; and

WHEREAS, the Board of Education and the Political Subdivision have passed a budget amendment appropriating the funds necessary to meet such liability and the same is attached hereto; and

WHEREAS, the effective date of participation shall be on a date as determined by the TCRS Board of Trustees, and the initial employer contribution rate shall be 4%, which is based on the estimated lump sum accrued liability of \$ 0.00.

NOW, THEREFORE, BE IT RESOLVED That the **Tullahoma Board of Mayor and Alderman of**  
(Name of Governing Body)

**Tullahoma City Board of Education** hereby authorizes all its employees in all its departments or  
(Name of Local Board of Education)

instrumentalities to become eligible to participate in TCRS in accordance with the above terms and conditions subject to the approval of the TCRS Board of Trustees. It is acknowledged and understood that pursuant to Tennessee Code Annotated, Section 8-35-111 neither the Board of Education nor the Political Subdivision shall make employer contributions to any other retirement or deferred compensation plans on behalf of any employee who participates in TCRS pursuant to this Resolution wherein the total combined employer contributions to such plans exceed 3% of the employee's salary, unless the Local Government Hybrid Plan or the State Employee and Teacher Hybrid Plan is adopted by the Board of Education for such employee. If either the Local Government Hybrid Plan or the State Employee and Teacher Hybrid Plan is adopted by the Board of Education, the Board of Education or the Political

Subdivision may make employer contributions to the defined contribution plan component of that Plan and to any one or more additional tax deferred compensation or retirement plans on behalf of such employee provided that the total combined employer contributions to such plans on behalf of the employee does not exceed 7% of the employee's salary.

STATE OF TENNESSEE

COUNTY OF COFFEE

I, Sandra Lynn Vaughn, clerk of the

Tullahoma City Schools Coffee Co, Tullahoma  
(Name of Governing Body) (County, City Town, etc.)

Tennessee, do hereby certify that this is a true and exact copy of the foregoing Resolution that was approved and adopted in accordance with applicable law at a meeting held on the 16<sup>th</sup> day of October, 2017, the original of which is on file in this office.

IN WITNESS WHEREOF, I have hereunto set my hand, and the seal of the Tullahoma City Board of Education  
(Name of Board of Education)

Sandra Lynn Vaughn  
As Clerk of the Board, as aforesaid

Seal



Phyllis K. Dillingham  
adm. exp. 11/17/2020

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## **STATISTICAL REPORTS**

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## ANALYSIS OF MEMBERS ACTIVELY CONTRIBUTING

	9/30/2015	12/31/2015	3/31/2016	6/30/2016	9/30/2016	12/31/2016	3/31/2017	6/30/2017	9/30/2017
<b>Group I Members:</b>									
(State & Higher Ed.)	53,447	51,412	50,691	45,516	44,225	42,815	42,861	41,731	40,996
Highway Patrol		764	756	726	717	711	713	704	692
Wildlife Officers		191	191	190	191	188	187	186	183
Teachers	69,977	69,589	68,474	61,820	60,876	60,013	59,884	58,365	58,202
General Employees of Polisubs	87,163	80,580	81,199	73,655	73,734	73,821	74,574	73,897	74,966
Firemen & Policemen		7,358	7,446	7,040	7,108	7,233	7,306	7,350	7,476
General Assembly	114	111	111	103	103	98	97	96	94
County Officials	2	2	2	1	1	1	2	2	2
Board Members		439	435	392	386	395	389	382	378
County Judges	19	18	18	17	15	14	14	12	11
Attorneys General	621	619	608	574	571	506	500	493	489
<b>Total Group I</b>	<b>211,343</b>	<b>211,083</b>	<b>209,931</b>	<b>190,033</b>	<b>187,984</b>	<b>185,795</b>	<b>186,527</b>	<b>183,218</b>	<b>183,489</b>
<b>Group II &amp; Prior Class:</b>									
Wildlife Officers	1	1							
Highway Patrol	1	1	1						
Firemen & Policemen-									
Political Subdivisions	9	8	10	10	11	11	11	10	10
<b>Total Group II &amp; Prior Class</b>	<b>11</b>	<b>10</b>	<b>11</b>	<b>10</b>	<b>11</b>	<b>11</b>	<b>11</b>	<b>10</b>	<b>10</b>
<b>Group III and Prior Class:</b>									
State Judges	1	1	1	1	1	1	1	1	1
County Judges	1	1	1	1	1	1	1	1	0
Attorneys General	2	1	1	1	1	1	1	1	0
County Officials	2	2	2	2	2	2	2	2	2
<b>Total Group III &amp; Prior Class</b>	<b>6</b>	<b>5</b>	<b>3</b>						
<b>Group IV</b>									
State Judges	123	122	121	113	113	115	113	113	111
<b>State &amp; Teacher Hybrid Plan</b>									
State	7,905	9,242	10,754	10,271	11,251	12,521	13,957	14,869	15,929
General Assembly	16	16	17	17	17	27	27	27	28
Teacher	11,205	11,967	12,229	11,142	14,560	15,291	15,965	15,681	19,099
Attorneys General, Judges	35	37	37	37	37	36	35	35	36
Political Subdivisions	189	349	453	474	673	711	971	1,244	1,620
Public Safety						178	220	222	222
<b>Alcoa</b>						43	43	43	43
<b>Local Government Plans</b>									
Alternate DB	24	30	35	25	30	34	36	36	40
Hybrid Plan W/O Cost Controls	125	179	207	173	194	217	244	267	292
<b>Total Membership</b>									
<b>Contributing to TCRS</b>	<b>230,982</b>	<b>233,040</b>	<b>233,800</b>	<b>212,300</b>	<b>215,058</b>	<b>216,493</b>	<b>218,731</b>	<b>215,770</b>	<b>220,922</b>
Teachers Contributing to ORP	10,290	10,043	9,763	9,609	9,586	8,830	8,804	8,638	8,387
<b>Grand Totals</b>	<b>241,272</b>	<b>243,083</b>	<b>243,563</b>	<b>222,025</b>	<b>224,644</b>	<b>225,323</b>	<b>227,535</b>	<b>224,408</b>	<b>229,309</b>

**RETIRED PAYROLL  
STATISTICS  
September 30, 2017**

	<u>AMOUNT</u>	<u># OF RETIREES</u>
STATE EMPLOYEES	\$ 63,763,671.55	46,421
STATE PAID JUDGES	\$ 1,038,310.73	212
COUNTY PAID JUDGES	\$ 295,067.10	75
ATTORNEY GENERALS	\$ 998,350.72	250
COUNTY OFFICIALS	\$ 354,153.43	163
PUBLIC SERVICE COMMISSIONERS	\$ 8,911.50	4
POLITICAL SUBDIVISIONS	\$ 33,465,184.70	39,125
TEACHERS	\$ 106,097,523.18	50,140
LOCAL TEACHERS	\$ 3,206,351.05	1,675
GOVERNORS AND WIDOWS	\$ 31,688.00	5
AGED TEACHERS	\$ 526.81	4
OTHERS	<u>\$ 200,670.92</u>	<u>76</u>
Total	\$ 209,460,409.69	138,150

**RETIRED PAYROLL  
STATISTICS  
July 1, 2017  
through  
September 30, 2017**

	<u>AMOUNT</u>	<u># OF RETIREES</u>
STATE EMPLOYEES	\$ 191,215,757.92	46,421
STATE PAID JUDGES	\$ 3,097,256.87	212
COUNTY PAID JUDGES	\$ 895,973.82	75
ATTORNEY GENERALS	\$ 2,979,475.06	250
COUNTY OFFICIALS	\$ 1,062,460.29	163
PUBLIC SERVICE COMMISSIONERS	\$ 26,734.50	4
POLITICAL SUBDIVISIONS	\$ 99,912,161.42	39,125
TEACHERS	\$ 318,969,512.57	50,140
LOCAL TEACHERS	\$ 9,688,865.32	1,675
GOVERNORS AND WIDOWS	\$ 95,064.00	5
AGED TEACHERS	\$ 1,580.43	4
OTHERS	<u>\$ 583,527.03</u>	<u>76</u>
<b>Total</b>	<b>\$ 628,528,369.23</b>	<b>138,150</b>

**NOTE: NINETY-NINE PERCENT (99%) OF THE RETIREES ARE ON DIRECT**

## NUMBER OF MEMBERS REFUNDED

<u>Month</u>	<u>2011-12</u>	<u>2012-13</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>
July	496	475	516	613	512	417	451
August	466	471	782	820	403	425	458
September	447	394	457	586	522	458	343
October	383	375	378	483	364	379	
November	364	319	314	244	359	321	
December	257	241	276	338	326	344	
January	348	338	402	322	386	308	
February	312	335	310	238	351	380	
March	262	253	284	331	355	354	
April	346	311	424	338	347	405	
May	329	274	866	247	332	347	
June	339	336	674	383	336	352	
TOTAL	<u>4,349</u>	<u>4,122</u>	<u>5,683</u>	<u>4,943</u>	<u>4,593</u>	<u>4,490</u>	<u>1,252</u>

**REFUND EXPENDITURES  
2017-2018 FISCAL YEAR**

<b>MONTH</b>	<b>MEMBER'S CONTRIBUTIONS</b>	<b>414(H) CONTRIBUTIONS</b>	<b>MEMBER'S INTEREST</b>	<b>EMPLOYER CONTRIBUTIONS</b>	<b>DEATH PAYMENTS</b>	<b>TOTAL</b>
July	35,548.25	3,211,415.45	1,145,920.84	0.00	526,717.66	\$4,919,602.20
August	12,799.99	3,064,728.29	980,946.29	0.00	494,134.94	\$4,552,609.51
September	123,840.91	2,095,841.18	699,097.15	93,460.04	387,434.47	\$3,399,673.75
October						
November						
December						
January						
February						
March						
April						
May						
June						
<b>TOTAL</b>	<b>172,189.15</b>	<b>8,371,984.92</b>	<b>2,825,964.28</b>	<b>93,460.04</b>	<b>1,408,287.07</b>	<b>\$12,871,885.46</b>

**PRIOR SERVICE ACTIVITY**  
**July 1, 2017 through September 30, 2017**

Legacy State:	Type of Service	No of Members	Years of Service	Amount
	Backpayment	1	1	\$ 6,527
	Military	-	-	-
	Redeposit	4	11	\$ 31,945
	Totals	5	11	\$ 38,472

Legacy Teachers:	Type of Service	No of Members	Years of Service	Amount
	Backpayment	3	3	\$ 16,059
	Military	-	-	-
	Redeposit	7	22	\$ 126,423
	Totals	10	25	\$ 142,482

Legacy Higher Education:	Type of Service	No of Members	Years of Service	Amount
	Backpayment	10	43	\$ 694,467
	Military	-	-	-
	Redeposit	-	-	-
	Totals	10	43	\$ 694,467

Legacy Political Subdivisions:	Type of Service	No of Members	Years of Service	Amount
	Backpayment	45	210	\$ 338,763
	Military	-	-	-
	Redeposit	5	14	\$ 63,037
	Totals	50	224	\$ 401,800

Hybrid Higher Education:	Type of Service	No of Members	Years of Service	Amount
	Backpayment	2	2	\$ 2,143
	Military	-	-	-
	Redeposit	0	0	-
	Totals	2	2	\$ 2,143

Hybrid Teachers:	Type of Service	No of Members	Years of Service	Amount
	Backpayment	1	1	\$ 10,903
	Military	-	-	-
	Redeposit	0	0	-
	Totals	1	1	\$ 10,903

Hybrid Political Subdivisions:	Type of Service	No of Members	Years of Service	Amount
	Backpayment	9	3	\$ -
	Military	-	-	-
	Redeposit	0	0	-
	Totals	9	3	\$ -

**Hybrid State:**

Type of Service	No of Members	Years of Service	Amount
Backpayment	1	1	\$ 6,527
Military	1	2	\$ -
Redeposit	0	0	\$ -
Totals	2	2	\$ 6,527

**Grand Totals:**

Type of Service	No of Members	Years of Service	Amount
Backpayment	72	264	\$ 1,075,389
Military	1	2	-
Redeposit	16	46	221,405
Totals	89	312	\$ 1,296,796

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# **DISABILITY RETIREMENT REPORT**

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## Disability Statistical Report

### First Quarter 17-18

Disability Applications Received	July	28
	August	31
	September	<u>17</u>
	TOTAL	76
Initial Claims Approved	July	13
	August	24
	September	<u>19</u>
	TOTAL	56
Initial Claims Disapproved	July	11
	August	04
	September	<u>10</u>
	TOTAL	25
Initial Claims Approved after Reconsideration		07
Initial Claims Disapproved after Reconsideration		05
Re-Evaluation Claims Approved		30
Re-Evaluation claims Disapproved		01

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**APPROVED FOR DISABILITY  
FIRST QUARTER  
2017-2018**

Type	Re-E	Re-C	Age	EMPLOYER	SVC	AFC	OPT.	MO.BEN	POSITION	DISABILITY SUMMARY
ORD.	NO	YES	50	POL SUB	119	\$37,474	A	\$903	FIREFIGHTER	LUMBAR DISC HERNIATION/ SEVERE R-FOOT DROP/ R-LEG PARESIS/ LEG PAIN
SS-ORD	YES	NO	48	TEACHER	290	N/A	N/A	N/A	TEACHER	CVI/ HYPERTENSION/ ANXIETY & DEPRESSION/ LOSS OF VISION
ORD.	NO	NO	53	TEACHER	203	\$46,661	A	\$1,102	TEACHER	C-SPINE FUSION WITH COMPLICATIONS, VOCAL CORD PARALYSIS
ORD.	NO	NO	58	TEACHER	69	\$44,512	A	\$584	TEACHER	LUMBAR SPINE STRAIN/ DDD/ ANXIETY DISORDER/ OSTEOARTHRITIS
ORD.	NO	NO	58	POL SUB	229	\$34,809	D	\$698	MECHANIC	LUMBAR DISC DEGENERATION WITH CENTRAL CANAL STENOSIS, DEPRESSION
ORD.	NO	NO	56	POL SUB	227	\$55,812	B	\$1,150	ASSISTANT DIRECTOR	MALIGNANT MELANOMA OF LEFT LOWER LIMB/ BRAIN METASTASIS/ SEIZURES/ TERMINAL
SS-ORD	NO	NO	55	TEACHER	249	\$25,208	E	\$590	SPECIAL ED ASSISTANT	ENDOMETRIAL CANCER/ UTERINE CANCER/ UTERINE FIBROIDS/ MORBID OBESITY
INACT.	NO	NO	48	POL SUB	176	\$32,117	A	\$236	HEAVY EQUIPMENT OPERATOR	DIABETIC MACULAR EDEMA (BOTH EYES)/ RETINOPATHY/ OCULAR HYPERTENSION
ORD.	NO	NO	52	POL SUB	70	\$21,306	A	\$316	SECRETARY	MAJOR DEPRESSION SEVERE & RECURRENT/ PANIC DISORDER W/ AGORAPHOBIA/ OBESITY
SS-ORD	NO	NO	57	POL SUB	257	\$24,526	D	\$564	REGISTRAR	COLERECTAL CANCER/ MALIGNANT PLEURAL EFFUSION/ MALIGNANT NEOPLASM OF BONE
SS-ORD	NO	NO	59	STATE	81	\$22,588	A	\$266	SECRETARY	SPINAL STENOSIS, OSTEOARTHRITIS, LEVOSCOLIOSIS OF THE LUMBAR SPINE

**APPROVED FOR DISABILITY  
FIRST QUARTER  
2017-2018**

Type	Re-E	Re-C	Age	EMPLOYER	SVC	AFC	OPT.	MO.BEN	POSITION	DISABILITY SUMMARY
ORD.	NO	NO	53	STATE	92	\$33,843	A	\$586	DIRECTOR-NURSING	KNEE INJURY RESULTING IN TOTAL KNEE REPLACEMENT
ORD.	NO	NO	53	POL SUB	148	\$18,058	A	\$408	EDUCATION ASST.	PTSD/ DJD/ MIGRAINE HEADACHES/ TINNITUS/ HYPERTHYROIDISM/ ANXIETY DISORDER
SS-ORD	NO	NO	58	POL SUB	163	\$39,738	D	\$578	HVAC TECH	CAD/ HYPERLIPODENIA/ OBESITY/
SS-ORD	NO	NO	52	TEACHER	169	\$58,221	D	\$1,080	TEACHER	CHF/ FATIGUE/ HYPERTENSION/ SLEEP APNEA/
SS-ORD	NO	NO	53	TEACHER	290	\$48,340	B	\$1,250	PRINCIPAL	METASTATIC BREAST CANCER/ CHF
ORD.	NO	NO	52	TEACHER	171	\$47,421	E	\$1,066	TEACHER	PTSD, ANXIETY, DEPRESSION, AND FIBROMYALGIA
SS-ORD	NO	NO	58	STATE	173	\$33,954	A	\$621	ELECTRICIAN	DIABETIC POLYNEUROPATHY/ BULGING LUMBAR DISC/ HTN/ CHRONIC PAIN
ORD.	YES	NO	48	POL SUB	208	\$43,634	A	\$1,030	FIREMAN	PTSD, DEPRESSION, ANXIETY AND ADJUSTMENT DISORDER
ORD.	YES	NO	51	TEACHER	71	\$32,963	D	\$535	TEACHER	LYME DISEASE, GERD, CHRONIC FATIGUE SYNDROME
SS-ORD	NO	NO	54	TEACHER	266	\$43,694	A	\$1,144	TEACHER	COPD/ CHRONIC RESPIRATORY FAILURE/ ANXIETY & DEPRESSION/ CHRONIC LOW BACK PAIN
ORD.	NO	NO	59	TEACHER	119	N/A	N/A	N/A	TEACHER	PSORIATIC ARTHRITIS/ CHRONIC MOOD DISORDER/ DEGENERATIVE DISC DISEASE

**APPROVED FOR DISABILITY  
FIRST QUARTER  
2017-2018**

Type	Re-E	Re-C	Age	EMPLOYER	SVC	AFC	OPT.	MO.BEN	POSITION	DISABILITY SUMMARY
SS-ORD	NO	NO	57	POL SUB	255	\$30,808	A	\$773	TRUCK DRIVER	COPD/ OXYGEN 24HRS
ORD.	NO	NO	54	POL SUB	282	\$61,938	D	\$1,437	CONSTRUCTIO N SUPERVISOR	IDIOPATHIC PROGRESSIVE POLYNEUROPATHY, DIABETES MELLITUS, MI
SS-INACT.	NO	NO	53	POL SUB	261	\$42,938	B	\$675	DEPUTY SHERIFF	TRAUMATIC BRAIN INJURY/ HEARING LOSS/ DDD/ PTSD/
ORD.	YES	NO	48	STATE	173	\$26,307	A	\$621	RECORDS SPECIALIST	BIPOLAR/ MAJOR DEPRESSION W/ PSYCHOTIC FEATURES/ ANXIETY/ BACK PAIN
ORD.	YES	NO	44	TEACHER	220	\$47,571	D	\$1,036	TEACHER	BIPOLAR/ MAJOR DEPRESSION W/ PSYCHOTIC FEATURES/ ANXIETY/ BACK PAIN
ORD.	NO	YES	59	STATE	230	\$37,190	D	\$756	LIEUTENANT	TOTAL KNEE REPLACEMENTS R&I/ CHRONIC PAIN
SS-ORD	NO	NO	55	POL SUB	103	\$16,774	A	\$272	PARA PRO	TERMINAL BRAIN CANCER
SS-ORD	NO	NO	57	POL SUB	152	\$39,115	A	\$731	TECH	MELANOMA CANCER, RUPTURED COLON
ORD.	YES	YES	49	TEACHER	206	N/A	N/A	N/A	TEACHER	RHEUMATOID ARTHRITIS/ SEVERE JOINT PAIN
SS-INACT.	NO	NO	38	STATE	95	N/A	N/A	N/A	DEV TECH	END STAGE RENAL DISEASE
ORD.	NO	NO	55	STATE	124	\$33,681	A	\$576	COORDINATOR	CONGESTIVE HEART FAILURE, COPD, DIABETES WITH RETINOPATHY

**APPROVED FOR DISABILITY  
FIRST QUARTER  
2017-2018**

Type	Re-E	Re-C	Age	EMPLOYER	SVC	AFC	OPT.	MO.BEN	POSITION	DISABILITY SUMMARY
ORD.	NO	NO	55	STATE	173	\$49,141	E	\$1,047	RN	DEMYELINATING BRAIN DISEASE, FIBROMYALGIA, GRAVES DISEASE
INACT.	NO	NO	48	STATE	69	N/A	N/A	N/A	FISCAL AUDITOR	BIPOLAR/ SCHIZOPHRENIA/ ADHD/ DEPRESSION
ORD.	YES	YES	45	TEACHER	241	N/A	N/A	N/A	TEACHER	DEPRESSION, PSYCHOSIS
ORD.	YES	NO	46	POL SUB	225	\$55,964	C	\$1,308	LIEUTENANT	PANCREATIC CANCER
ORD.	NO	NO	49	POL SUB	189	\$42,630	A	\$1,028	TEACHER	EPILEPSY/ DEPRESSIVE D/O/ GENERALIZED ANXIETY/ PTSD
SS-ORD	YES	NO	26	POL SUB	63	\$34,954	A	\$825	UTILITY WORKER	QUADRIPLEGIA
ORD.	YES	YES	46	STATE	175	\$32,644	A	\$771	CORRECTIONAL OFFICER	NECK FUSION WITH SPASMS
ORD.	NO	NO	53	POL SUB	175	\$31,243	A	\$738	SPECIAL OPS SEAGENT	MIGRAINE HEADACHES/ ARTHROPATHY/DEPRESSION/ CHRONIC PAIN
ORD.	NO	NO	39	TEACHER	198	\$54,438	B	\$1,231	TEACHER	STAGE 4 BREAST CANCER
ORD.	NO	NO	59	STATE	217	\$44,683	B	\$1,240	MAINFRAME TECH II	MULTIPLE SCLEROSIS/ HYPERTENSION/ DEPRESSION/
ORD.	NO	NO	55	POL SUB	300	\$52,963	D	\$1,398	SCHOOL NURSE	PROGRESSIVE PARKINSONS DISEASE/ TREMORS/ HYPERTENSION

**APPROVED FOR DISABILITY  
FIRST QUARTER  
2017-2018**

Type	Re-E	Re-C	Age	EMPLOYER	SVC	AFC	OPT.	MO.BEN	POSITION	DISABILITY SUMMARY
ORD.	NO	NO	59	STATE	222	\$29,493	A	\$667	OPERATION TECH	ISCHEMIC HEART DISEASE/ MYOCARDIAL INFRACTION/RESPIRATORY FAILURE
SS-ORD	NO	NO	53	TEACHER	251	N/A	N/A	N/A	TEACHER	MULTIPLE SCLOROSIS, LEGALLY BLIND, DIABETES
SS-ORD	NO	NO	54	POL SUB	139	\$44,663	D	\$697	PLANT OPERATOR	STROKE, COMPLEX REGIONAL PAIN SYNDROME
SS-ORD	YES	NO	49	POL SUB	125	\$46,372	B	\$958	MAINTENANCE	PTSD, BIPOLAR, SLEEP APNEA, TYPE 2 DIABETES
SS-ORD	NO	NO	57	STATE	124	\$33,032	B	\$461	MAINTENANCE	LIVER CANCER
ORD.	NO	NO	41	STATE	180	N/A	N/A	N/A	SERGEANT	TRAUMATIC BRAIN INJURY/ C4-SPINE FUSION/ NECK PAIN
INACT.	NO	NO	44	POL SUB	163	N/A	N/A	N/A	PATROLMAN	SCHIZO AFFECTIVE DISORDER UNSPECIFIED/ HYPERTENSION
ORD.	NO	NO	58	POL SUB	178	\$33,891	B	\$569	LABOROR	COLON CANCER/ POSTSURGICAL MALABSORPTION/ ANEMIA
ORD.	NO	NO	53	TEACHER	186	\$48,309	D	\$1,046	TEACHER	BIPOLAR, ADHD, AND ANXIETY
ORD.	NO	NO	54	TEACHER	162	N/A	N/A	N/A	TEACHER	GRAVES DISEASE, MS
SS-ORD	YES	NO	49	STATE	157	\$25,953	A	\$613	SECRETARY	STAGE 4 LUNG CANCER/NEOPLASM OF LUNG/SECONDARY MALIGNANT TO BONE

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**DISAPPROVED FOR DISABILITY  
FIRST QUARTER  
2017-2018**

TYPE	RE-C	AGE	EMPLOYER	POSITION	SVC	DISABILITY SUMMARY	REASON DENIED
ORD.	NO	53	STATE	LAB TECH 2	22	RUPTURED ANEURYSM	MEDIUM LINE OF WORK POSSIBLE
ORD.	NO	52	STATE	CORRECTIONAL OFFICER	23	ANXIETY, DEPRESSION, AND PANIC ATTACKS	LIGHT TO SEDENTARY WORK POSSIBLE
ORD.	NO	52	STATE	MENTAL HEALTH	7	SPINAL STENOSIS IN CERVICAL REGION/ CERVICAL DISC DISEASE/ CHRONIC PAIN	LIMITED TO SEDENTARY WORK
ORD.	NO	39	STATE	DEV TECH 2	16	SEVERE ANXIETY / HYPERTENSION/ SLEEP APNEA/ COPD	LIMITED TO SEDENTARY WORK
ORD.	NO	50	POL SUB	CAFETERIA MANAGER	21	SUBACUTE OBLITERATIVE BRONCHIOLITIS/ INTERSTITIAL LUNG DISEASE/	LIMITED TO SEDENTARY WORK
ACC.	NO	62	POL SUB	EQUIPMENT OPERATOR	19	BACK PAIN/ JOINT PAIN/ DEGENERATION OF INTERVERTEBRAL DISC	CAPABLE OF MEDIUM TO LIGHT WORK
ACC.	YES	52	STATE	DRIVER LICENSE	23	CERVICAL RADICULOPATHY/ CHRONIC PAIN	CAPABLE OF SEDENTARY WORK
SS-ORD	NO	54	STATE	LIEUTENANT	8	POST PATELLOFEMORAL ARTHROPLASTY	LIMITED TO LIGHT WORK
ORD.	NO	46	STATE	ELIGIBILITY COUNSELOR	14	FIBROMYALGIA/ INFLAMMATORY ARTHRITIS/ SJORGEN'S SYNDROME/ CARPAL TUNNEL	LIMITED TO LIGHT TO MEDIUM WORK
ORD.	NO	45	TEACHER	TEACHER	9	PTSD, SEVERE CHRONIC MAJOR DEPRESSIVE DISORDER	LIMITED TO SEDENTARY WORK
ORD.	NO	51	STATE	ACCOUNT CLERK II	22	VERTIGO/ MIGRANES/ AND DIZZINESS	LIMITED TO SEDENTARY WORK

**DISAPPROVED FOR DISABILITY  
FIRST QUARTER  
2017-2018**

TYPE	RE-C	AGE	EMPLOYER	POSITION	SVC	DISABILITY SUMMARY	REASON DENIED
ORD.	NO	53	STATE	INSTRUCTOR	13	CONGENITAL HEARING LOSS/ OSTEOARTHRITIS	PATIENT LIMITED TO LIGHT WORK
ORD.	NO	49	STATE	EQUIPMENT MECHANIC	5	DDD/ BACK PAIN/ DEPRESSION/ FATIGUE/ CAD	LIMITED TO SEDENTARY WORK
ORD.	NO	47	STATE	OPERATION TECH	10	ANXIETY/ DDD/ MIGRAINE/	LIMITED TO SEDENTARY WORK
ORD.	NO	41	STATE	SERGEANT	14	TRAUMATIC BRAIN INJURY/ C4-SPINE FUSION/ NECK PAIN	LIMITED TO SEDENTARY WORK
ORD.	NO	57	STATE	YOUTH WORKER	10	LUMBAR SPINDYLOSIS/ SPINAL STENOSIS/ CHRONIC PAIN	CAPABLE OF LIGHT TO SEDENTARY WORK
ORD.	YES	49	POL SUB	TEACHER'S AID	16	POLY ARTHROPATHY/ OSTEOARTHRITIS/ CERVICAL SPONDYLOSIS	CAPABLE OF SEDENTARY WORK
ORD.	NO	48	STATE	CLERK 2	11	LUMBAR DEGENERATIVE DISK DISEASE, FIBROMYALGIA	LIGHT TO SEDENTARY WORK POSSIBLE
ORD.	NO	59	STATE	INFORMATION SYSTEMS ANALYST	8	LUMBAR RADICULOPATHY, CERVICAL SPONDYLOSIS, AND DEGENERATIVE DISK DISEASE.	LIGHT TO SEDENTARY WORK POSSIBLE
ORD.	NO	54	STATE	FOOD SERVICE WORKER	13	HIP REPLACEMENT	EXPECTED TO RETURN TO WORK 1/2017, LIGHT TO SEDENTARY WORK
ORD.	YES	52	POL SUB	FOOD SERVICE	15	OSTEOARTHRITIS IN UPPER AND LOWER EXTREMITIES	LIGHT TO SEDENTARY WORK SEEMS POSSIBLE
ORD.	YES	55	POL SUB	TEACHER ASSISTANT	9	CERVICAL FACET SYNDROME, CERVICALGIA	SEDENTARY ACTIVITY POSSIBLE

**DISAPPROVED FOR DISABILITY  
FIRST QUARTER  
2017-2018**

TYPE	RE-C	AGE	EMPLOYER	POSITION	SVC	DISABILITY SUMMARY	REASON DENIED
ORD.	NO	51	POL SUB	POLICE OFFICER	17	PANIC ATTACKS AND ANXIETY DISORDER	CAPABLE OF LIGHT WORK
ORD.	YES	53	POL SUB	CAFETERIA MANAGER	14	ARTHRITIS/FIBROMYALGIA/DDDD/DIABETES	SEDENTARY ACTIVITY POSSIBLE
ORD.	YES	38	STATE	POLICE CORPORAL	12	BREAST CANCER	LIGHT TO SEDENTARY WORK SEEMS POSSIBLE.

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## **FINANCIAL STATEMENTS**

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**TENNESSEE RETIREE GROUP TRUST**  
**STATEMENT OF FIDUCIARY NET POSITION**  
**JUNE 30, 2017**

**ASSETS**

Cash and cash equivalents	\$ 625,724,780.08
Cash collateral for securities on loan	5,003,217,942.00

**Receivables**

Investment income receivable	149,814,859.73
Derivative instruments receivable	104,917,082.75
Investments sold	79,316,692.92
<b>Total receivables</b>	<u>334,048,635.40</u>

**Investments at fair value**

Government securities	8,583,837,642.51
Corporate securities	5,076,734,340.91
Corporate stocks	24,805,712,916.54
Derivative Instruments	393,045.46
Strategic lending	1,860,381,922.18
Private equities	1,862,282,038.03
Real estate	4,049,446,382.48
<b>Total investments</b>	<u>46,238,788,288.11</u>

<b>TOTAL ASSETS</b>	<u>52,201,779,645.59</u>
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**LIABILITIES AND NET POSITION**

**LIABILITIES**

Investments purchased	68,183,874.15
Other investments payables	14,927,208.21
Derivative instrument payable	109,477,812.01
Cash collateral for securities on loan	5,003,217,942.00
<b>TOTAL LIABILITIES</b>	<u>5,195,806,836.37</u>

<b>NET POSITION HELD IN TRUST FOR POOL PARTICIPANTS</b>	<u><u>\$ 47,005,972,809.22</u></u>
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See Accompanying Notes to the Financial Statements  
**UNAUDITED**

**TENNESSEE RETIREE GROUP TRUST  
STATEMENT OF CHANGES IN FIDUCIARY NET POSITION  
FOR THE PERIOD ENDED JUNE 30, 2017**

**OPERATIONS**

**INVESTMENT INCOME**

Net appreciation in fair value of investments	\$ 3,851,639,305.44
Income on securities	1,055,088,593.83
Total investment income	<u>4,906,727,899.27</u>
Less: investment expense	76,269,476.18
Net income (loss) from investing activities	<u>4,830,458,423.09</u>
 Securities lending activities	
Securities lending income	57,856,508.06
Less: securities lending expense	32,427,680.26
Net income from securities lending activities	<u>25,428,827.80</u>
<b>NET INVESTMENT INCOME</b>	<u><u>4,855,887,250.89</u></u>

**CAPITAL SHARE TRANSACTIONS**

Net shares sold	1,565,532,283.55
Net shares redeemed	2,624,786,522.94
<b>TOTAL DECREASE FROM CAPITAL SHARE TRANSACTIONS</b>	<u><u>(1,059,254,239.39)</u></u>

**NET INCREASE IN FIDUCIARY NET POSITION** 3,796,633,011.50

**NET POSITION RESTRICTED FOR PARTICIPANTS**

**NET POSITION, BEGINNING OF PERIOD** 43,209,339,797.72

**NET POSITION, END OF PERIOD** \$ 47,005,972,809.22

See Accompanying Notes to the Financial Statements

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**Tennessee Retiree Group Trust**  
**Notes to Financial Statements**  
**June 30, 2017**

**A: Summary of Significant Accounting Policies**

**Reporting entity:** The Tennessee Retiree Group Trust (TRGT) is an external investment pool sponsored by the State of Tennessee. The external portion of the TRGT consists of funds belonging to entities outside of the State of Tennessee Financial Reporting Entity, and has been included as a separate investment trust fund in the *Tennessee Comprehensive Annual Financial Report*. The internal portion, consisting of funds belonging to the State and its component units, has been included in the various participating funds and component units in the *Tennessee Comprehensive Annual Financial Report*.

**Measurement focus and basis of accounting:** The accompanying financial statements have been prepared in accordance with generally accepted accounting principles (GAAP) as prescribed by the Governmental Accounting Standards Board (GASB). The financial statements have been prepared using the flow of economic resources measurement focus and the accrual basis of accounting. Under the accrual method, revenues are recorded when earned, and expenses are recorded at the time liabilities are incurred regardless of the timing of related cash flows.

**Cash and cash equivalents:** Cash and cash equivalents includes cash and short-term investments with a maturity date within three months of the acquisition date. Cash management pools are included as cash. Cash received that cannot be immediately invested in securities, or that is needed for operations, is invested in either the State Pooled Investment Fund sponsored by the State of Tennessee and administered by the State Treasurer or in the State Street Government Money Market Fund, a short-term, open-end mutual fund under the contractual arrangement for master custody services. The balance in this investment at June 30, 2017 was \$3,004,724.

**Method used to report investments and participant shares:** The TRGT is not registered with the Securities and Exchange Commission (SEC) as an investment company. The State of Tennessee has not obtained a credit quality rating for the TRGT from a nationally recognized credit ratings agency. The fair value of investment positions in the TRGT is determined daily based on the fair value of the pool's underlying portfolio. Furthermore, the State had not obtained or provided any legally binding guarantees to support the value of participant shares during the fiscal year. There are no restrictions on the sale or redemption of shares.

Investments are reported at fair value. Securities traded on a national exchange are valued at the last reported sales price. Investment income consists of realized and unrealized appreciation (depreciation) in the fair value of investments and interest and dividend income. Interest income is recognized when earned. Securities and securities transactions are recorded in the financial statements on trade-date basis.

The fair value of assets of the TRGT held at June 30, 2017 represents the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. Assets held are categorized for fair value measurement within the fair value hierarchy established by GAAP. The hierarchy is based on the valuation inputs used to measure the fair value of the asset and give the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements).

- Level 1 - Unadjusted quoted prices for identical assets or liabilities in active markets that can be accessed at the measurement date.

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- Level 2 - Quoted prices for similar assets or liabilities in active markets; quoted prices for identical or similar assets or liabilities in markets that are not active; assets or liabilities that have a bid-ask spread price in an inactive dealer market, brokered market and principal-to-principal market; and Level 1 assets or liabilities that are adjusted.
- Level 3 - Valuations derived from valuation techniques in which significant inputs are unobservable.

Investments where fair value is measured using the Net Asset Value (“NAV”) per share have no readily determinable fair value and have been determined to be calculated consistent with FASB principles for investment companies.

Where inputs used in the measurement of fair value fall into different levels of the hierarchy, fair value of the instrument in its entirety are categorized based on the lowest level input that is significant to the valuation. This assessment requires professional judgement and as such management developed a fair value committee that worked in conjunction with our custodian and investment professionals to make these valuations. All assets held were valued individually and aggregated into classes so to be represented in the table below.

Short-term securities generally include investments in money market-type securities reported at cost plus accrued interest.

Equity and equity derivative securities classified in Level 1 are valued using last reported sales prices quoted in active markets that can be accessed at the measurement date. Equity and equity derivative securities classified in Level 2 are securities whose values are derived daily from associated traded securities. Equity securities classified in Level 3 are valued with last trade data having limited trading volume.

US Treasury Bills, Bonds, Notes and Futures classified in Level 1 are valued using last reported sales prices quoted in active markets that can be accessed at the measurement date. Debt and debt derivative securities classified in Level 2 are valued using a bid-ask spread price from multiple independent brokers, dealers, or market principals, which are known to be actively involved in the market. Level 3 debt securities are valued using proprietary information, a single pricing source, or other unobservable inputs related to similar assets or liabilities.

Real estate investments classified in Level 3 are valued using the last valuations provided by external investment advisors or independent external appraisers. Generally, all direct real estate investments are appraised by a qualified independent appraiser(s) with the professional designation of Member of the Appraisal Institute (“MAI”), or its equivalent, every three (3) years beginning from the acquisition date of the property. The appraisals are performed using generally accepted valuation approaches applicable to the property type.

Investments in private mutual funds, traditional private equity funds, strategic lending funds and real estate funds that report using GAAP, the fair value, as well as the unfunded commitments, was determined using the prior quarter’s NAV, as reported by the fund managers, plus the current cash flows. These assets were then categorized by investment strategy. In instances where the fund investment reported using non-GAAP standards, the investment was valued using the same method, but was classified in Level 3.

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### Investments Measured at Fair Value

As of June 30, 2017

Expressed in Thousands

Investments at Fair Value Level	GAAP Hierarchy Level 1	GAAP Hierarchy Level 2	GAAP Hierarchy Level 3	NAV	Total Investments
Common Stock	22,203,415		42		22,203,457
Real Estate & REIT's	515,000		2,825,131	691,126	4,031,257
Limited Partnership Units	9,974		248,977	3,473,687	3,732,638
Mutual Funds	2,252,256			260,318	2,512,574
Real Estate Limited Partnership Units				18,189	18,189
Depository Receipts	79,036				79,036
Rights	647				647
Warrants	25				25
US Government Issues	5,252,407	169,543			5,421,950
Agency Securities		3,037,478			3,037,478
Corporate Bonds		3,730,899	22,211		3,753,110
Municipals		124,409			124,409
Other Asset Backed		303,464	64,033		367,497
CMO's		656,702	76,790		733,492
Auto Loans and Receivables		158,417			158,417
Preferred Stock	58,009	6,210			64,219
Derivative Instruments			393		393
<b>TOTAL INVESTMENTS AT FAIR VALUE</b>	<b>30,370,769</b>	<b>8,187,122</b>	<b>3,237,577</b>	<b>4,443,320</b>	<b>46,238,788</b>
Cash and Cash Equivalents					625,725
Cash Collateral on Loaned Securities					5,003,218
Other Receivables					79,317
Investment Income Receivable					149,815
Futures Receivable					104,917
<b>TOTAL FINANCIAL STATEMENT ASSETS</b>					<b>52,201,780</b>

The following table sets forth the additional disclosures of the TRGT's investments, which are stated at fair value based on the net asset value "NAV" (expressed in thousands), as a practical expedient, reported by the investment managers or general partners:

Asset Classification	Strategy	Number of Funds	NAV	Remaining Life	Redemption Terms	Redemption Restrictions
Limited Partnerships	Traditional Private Equity and Strategic Lending	72	3,527,432	Various	N/A	Various transfer and sale restrictions
Mutual Funds	International Public Equities	23	260,319	N/A	May Redeem all or part of the shares with at least fifteen (15) days written notice prior to the last business day of each month	Redemptions may be distributed in cash, in-kind or a combination and are subject to further restrictions by the fund's trustees
Real Estate Limited Partnerships	Real Estate Commingled Investments	17	691,126	N/A	N/A	Various transfer and sale restrictions

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**Traditional Private Equity and Strategic Lending:** The private equity asset class is categorized into two component portfolios: traditional and strategic lending. Generally speaking, the types of private equity strategies include: venture capital, buyout, natural resource, secondary, special situations, tactical, structured credit, and high yield debt. The majority of these investments have an approximate life of 10 years or greater and are considered illiquid. During the life of the partnerships, distributions are received as underlying partnership investments are realized. Transfer or sale of the partnership interest are restricted over the life of the partnership. The TRGT has no plans to liquidate any of these investments.

**International Public Equities using Mutual Funds:** TRGT will invest in mutual funds as an efficient and cost-effective means to gain passive exposure to a specific sector, industry or country. As of June 30, 2017, TRGT has retained Baring International Investment Limited to facilitate an international equity investment strategy utilizing, in part, sector and country index mutual funds.

**Real Estate Commingled Investments:** The real estate asset class is comprised of two different investment types: direct investments and commingled investments. A commingled investment is a pooled investment vehicle comprised of real estate investments that is overseen by an external investment manager or general partner. Generally speaking, the commingled real estate investment strategies include: office, retail, industrial, multi-family, and diversified. The majority of these investments have an approximate life of 10 years or greater and are considered illiquid. During the life of the pooled investment vehicle, distributions are received as underlying investments are realized. Transfer or sale of the interest are restricted over the life of the investment. The TRGT has no plans to liquidate any of these investments.

## **B: Deposits and Investments**

**Statutory Authority:** The Tennessee Retiree Group Trust (TRGT) was established in 2015 by a statutory enactment of the Tennessee General Assembly. The provisions of the TRGT are codified in *Tennessee Code Annotated* (TCA) Title 8, Chapters 34-37. Pursuant to this statute the Tennessee Consolidated Retirement System (TCRS) and its board of directors with the State Treasurer (Treasurer) as custodian, authorized by TCA 8-37-104 adopted this group trust for the purpose of pooling funds of TRGT with other assets in the custody of the Treasurer, solely for investment purposes. The assets invested consist exclusively of assets of exempt pension and profit sharing trusts and individual retirement accounts, custodial accounts, retirement income accounts, governmental plans and tax-exempt trusts under the Internal Revenue Code of 1986 and Rev. Rul. 81-100, as modified by Rev. Ruls. 2004-67, 2008-40 and 2011-1 (referred to herein as "Retirement Assets"). The Custodian shall be responsible for the managing and directing the investment of the Group Trust Funds in the same manner as it invests funds of the TCRS.

The TRGT is authorized to invest in securities in accordance with the investment policy of the TCRS. That policy allows the Trust to invest in bonds, debentures, preferred stock and common stock, real estate and in other good and solvent securities subject to the approval of the Board of Trustees, but further subject to the following statutory restrictions and provisions:

- a. The total sum invested in common and preferred stocks shall not exceed seventy-five percent (75 percent) of the total of the funds of the trust.
- b. The total sum invested in notes and bonds or other fixed income securities exceeding one year in maturity shall not exceed seventy-five percent (75 percent) of the total funds of the trust.
- c. Within the restrictions in (a) and (b) above, an amount not to exceed twenty-five percent (25 percent) of the total of the funds of the retirement system may be invested in securities of the same kinds, classes, and investment grades as those otherwise eligible for investment in various approved

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foreign countries, provided that such percentage may be increased by the board with the subsequent approval of the council on pensions and insurance.

- d. Within the restrictions in (a) and (b) above, funds may be invested in Canadian securities which are substantially of the same kinds, classes and investment grades as those otherwise eligible for investment.
- e. The total amount of securities loaned under a securities lending program cannot exceed thirty percent (30 percent) of total assets.
- f. The total sum invested in real estate shall not exceed ten percent (10 percent) of the market value of total assets.
- g. The total sum invested in private equities shall not exceed ten percent (10 percent) of the market value of total assets.

State statute also authorizes the TRGT to invest in forward contracts to hedge its foreign currency exposure and to purchase or sell domestic equity index futures contracts for the purpose of asset allocation relating to the domestic equity portfolio. The total amount of the financial futures contract obligation shall not exceed ten percent (10 percent) of the market value of the TRGT's total assets. Gross exposure to approved fixed income financial instruments will be limited to ten percent (10 percent) of the market value of the Trust's total assets for risk mitigating positions and 10 percent (10 percent) for risk positions. Position sizes will be measured by notional amounts. Options will be measured in their notional equivalents.

**Investment policy:** The TRGT investment authority is established pursuant to Tennessee Code Annotated Title 8, Chapter 37. The statute provides the Board of Trustees with the responsibility to establish the investment policy of the TRGT. The investment policy may be amended by the Board. The TRGT assets are managed on a total return basis with a long-term objective of achieving and maintaining a fully funded status for the benefits provided by the TCRS. The following was the Board's adopted asset allocation policy as of June 30, 2017:

<u>Authorized Asset Class</u>	<u>Target Allocation</u>
U.S. equity	31%
Canadian equity	2%
Developed market international equity	13%
Emerging market international equity	4%
Private equity	7%
U.S. fixed income	25%
Strategic lending	7%
Real estate	10%
Short-term securities	1%
Total	<u>100%</u>

**Securities Lending:** The TRGT is authorized to invest in securities lending investments by TCA 8-37-104(a)(6) with the terms established in the investment policy whereby TRGT loans securities to brokers and dealers (borrower) and in turn, TRGT receives collateral as either cash or securities. TRGT pays the borrower interest on the collateral received and invests the collateral with the goal of earning a higher yield than the interest rate paid to the borrower. Loans are limited to no more than thirty percent (30%) of the market value of the total assets in the TRGT portfolio and provided further that such loans are secured by collateral. Securities received as collateral hereunder shall have a market value equal to at least one hundred two

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percent (102%) of the market value of the loaned domestic security or one hundred five percent (105%) of any foreign security. Cash received as collateral shall equal at least one hundred percent (100%) of the market value of the loaned securities and may be invested by or on behalf of the TRGT in any instrument the TRGT may be directly invested. Cash Collateral is held in the TRGT name and is not subject to custodial credit risk. During the year there were no violations of legal or contractual provisions by the TRGT.

The TRGT securities lending program is managed by a third party lending agent, Deutsche Bank AG. The TRGT may loan any debt or equity securities which is owned by TRGT. At June 30, 2017, the TRGT had the following securities on loan and received the collateral as shown below:

### Securities Lending

As of June 30, 2017

#### Fair Value of Securities on Loan

Securities on Loan	Fair Value of Securities on Loan	Cash/Non-Cash Collateral Received
Fixed	\$2,199,334,136	\$2,246,041,260
Equity	2,866,817,317	2,927,699,742
Total	\$5,066,151,453	\$5,173,741,002

The TCRS has the ability to sell the collateral securities only in the case of a borrower default.

**Credit Risk:** Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. The credit quality distribution for the TRGT's investments in fixed income securities at year end is included in the schedule below. Securities are rated using Standard and Poor's and/or Moody's and are presented below using the Standard and Poor's rating scale. The State Pooled Investment Fund has not obtained a credit quality rating from a nationally recognized credit ratings agency.

TRGT's investment policy specifies that bond issues subject for purchase are investment grade bonds rated by one of the Nationally Recognized Statistical Rating Organizations (NRSROs). There is no requirement to divest an asset if it is downgraded after purchase. For short-term investments, the investment policy provides for the purchase of only the highest quality debt issues. Commercial paper should be rated in the highest tier by all rating agencies which rate the paper, with a minimum of two ratings required. Commercial paper cannot be purchased if a rating agency has the commercial paper on a negative credit watch. The investment policy also requires preparation of a credit analysis report on the corporation prior to purchasing commercial paper.

As noted below, the TRGT does not utilize its own bank accounts but invests in the State Pooled Investment Fund for its operating cash purposes. Required risk disclosures relative to the State Pooled Investment Fund are presented in the State of Tennessee Treasurer's Report. That report is available on the state's website at <http://www.tn.gov/treasury/>.

At June 30, 2017, the TRGT had the following investments:

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<b>Credit Quality Distribution for Securities with Credit Exposure as a percentage of Total Investments</b>		
<b>As of 6/30/2017</b>		
<i>Expressed in Thousands</i>		
<b>Rating</b>	<b>Fair Value</b>	<b>Percentage of Total Investments</b>
P-1	\$ 3,059	0.007%
AAA	489,032	1.058%
AA	389,599	0.843%
A	881,900	1.907%
BBB	2,338,128	5.057%
BB	274,236	0.593%
B	63,729	0.138%
CCC	55,459	0.120%
CC	871	0.002%
D	25,659	0.055%
NR	3,529,507	7.633%
	<b>\$ 8,051,179</b>	
U. S. Government Agencies and Obligations explicitly guaranteed by the U. S. Government	6,116,004	
<b>Total Fixed Income Securities</b>	<b>\$ 14,167,183</b>	
Equity	24,805,713	
Real Estate	4,049,446	
Private Equities	1,862,282	
Strategic Lending	1,860,382	
Preferred Stock not Classified as Fixed Income	64,219	
Derivative Instruments (not rated)	393	
Add Back Short term investment fund with custodian (NR)	(3,005)	
Add Back Short term investments classified as cash (NR)	(567,825)	
<b>Total Investments as shown on Fiduciary Net Position</b>	<b>\$ 46,238,788</b>	

**Interest Rate Risk:** Interest rate risk is the risk that future changes in prevailing market rates of interest will have an adverse effect on the fair value of debt investments. The fair values of securities with long terms to maturity may be highly sensitive to interest rate changes. The investment policy for the TRGT states that the maturity of its debt securities may range from short-term instruments, including investments in the State Pooled Investment Fund, to long-term bonds, with consideration of liquidity needs. However, the policy does not specifically address limits on investment maturities. Duration is a measure of a debt investment's exposure to fair value changes arising from changing interest rates. It uses the present value of cash flows weighted for those cash flows as a percentage of the investment's full price. The TRGT had the following investments and effective duration at June 30, 2017.

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<b>Effective Duration of Debt Investments</b>		
As of June 30, 2017		
Expressed in Thousands		
Investment Type	Fair Value As of June 30, 2017	Effective Duration (years)
Government Agencies	\$413,913	1.92
Government Bonds	3,690,363	13.87
Government Inflation Indexed	1,618,067	7.88
Government Mortgage Backed	3,473,525	4.46
Government Asset Backed	46,243	5.19
Municipal Bonds	124,409	9.95
Commercial Mortgage Backed	297,445	1.94
Corporate Asset Backed Securities	479,670	1.07
Corporate Bonds	3,753,110	9.08
Short Term Investments	270,438	0.00
<b>Total Debt Investments</b>	<b>\$14,167,183</b>	<b>8.22</b>

**Asset-Backed Securities:** The TRGT invests in various collateralized mortgage obligations (CMOs) which are mortgage-backed securities. These securities are based on cash flows from interest and principal payments on underlying mortgages and could therefore be more sensitive to prepayments by mortgagees as a result of a decline in interest rates. The fair value of CMOs at June 30, 2017 was \$733,491,810 of which \$365,012,488 were CMOs that are generally more sensitive to interest rate changes.

**Foreign Currency Risk:** Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment or deposit. The investment policy limits the asset allocation for international investments to twenty-five percent of total assets. The TRGT's exposure to foreign currency risk was as follows:

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<b>Foreign Currency-Denominated Investments</b>			
<b>As of June 30, 2017</b>			
Expressed in Thousands			
<b>Currency</b>	<b>Total Fair Value June 30, 2017</b>	<b>Equity</b>	<b>Cash</b>
Australian Dollar	\$335,353	\$335,022	\$331
British Pound Sterling	\$1,238,766	1,234,829	3,937
Canadian Dollar	\$1,027,138	1,026,139	999
Danish Krone	\$167,342	167,064	278
Euro Currency	\$2,030,838	2,017,503	13,335
Hong Kong Dollar	\$224,799	224,559	240
Japanese Yen	\$1,633,558	1,623,508	10,050
New Israeli shekel	\$13,954	13,843	111
New Zealand Dollar	\$10,887	10,626	261
Norwegian Krone	\$37,735	37,460	275
Singapore Dollar	\$85,027	84,877	150
Swedish Krona	\$180,566	180,139	427
Swiss Franc	\$614,822	613,645	1,177
<b>Total</b>	<b>\$7,600,785</b>	<b>\$7,569,214</b>	<b>\$31,571</b>

**Custodial Credit Risk:** Custodial Credit Risk for deposits is the risk that in the event of a bank failure, the TRGT deposits may not be returned to TRGT. The TRGT does not have an explicit policy with regards to Custodial Credit Risk for deposits. At year end, the TRGT had uninsured and uncollateralized cash deposits of \$31,571,026 in foreign currency held by our master custodian, State Street Bank, in State Street's name. These deposits were used for investments pending settlement.

**Rate of Return:** For the year, the money-weighted rate of return on investments in the TRGT, net of investment expense, was 11.295 percent. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

**Derivatives:**

**Futures** - The TRGT may buy or sell fixed income and equity index futures contracts for the purposes of making asset allocation changes in an efficient and cost effective manner and to improve liquidity. Gains (losses) on futures hedge losses (gains) produced by any deviation from the TRGT target allocation. The gains and losses resulting from daily fluctuations in the fair value of the outstanding futures contract are settled daily, on the following day, and a receivable or payable is established for any unsettled gain or loss as of the financial statement date. As of June 30, 2017, the TRGT was under contract for fixed income and equity index futures and the resulting payable is reflected in the financial statements at fair value.

**Foreign Currency Forward Contracts** - The international securities expose the TRGT to potential losses due to a possible rise in the value of the US dollar. The TRGT investment managers can reduce foreign currency exposure by selling foreign currency forward contracts, at agreed terms and for future settlement, usually within a year. The manager will reverse the contract by buying the foreign currency before the settlement date. A gain (loss) on this transaction pair will hedge a loss (gain) on the currency movement of the international security. The TRGT can sell up to 80% of its foreign currency exposure into US dollars. Foreign

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currency forward contracts expose the TCRS to foreign currency risk as they are denominated in foreign currency.

Any unrealized gain on foreign currency forward contracts has been reflected in the financial statements as an investment. The notional amount of the foreign currency forward contracts has been reflected in the financial statements as a receivable and a payable. Any unrealized loss on foreign currency forward contracts has been included in the payable established for the contracts.

**Mortgages** - The TRGT is authorized to invest in To Be Announced (TBA) mortgage backed securities similar to the foreign currency forward contracts. The TRGT enters into agreements to purchase pools of mortgage backed securities prior to the actual security being identified. The TRGT will roll this agreement prior to settlement date to avoid taking delivery of the security. Any unrealized gain on TBA mortgage backed securities has been reflected in the financial statements as an investment. Any unrealized loss on TBA mortgage backed securities has been included in the payable established for the mortgages. The notional amounts of these agreements have been included in the financial statements as a receivable and a payable. The TRGT invests in these derivatives to adjust its exposure to mortgage coupon risk and to replicate the return on mortgage backed securities portfolios without actually purchasing the security.

**Options** - The TRGT is authorized to enter into option contracts and any income earned on option contracts has been included in investment income in the financial statements.

The fair value balances and notional amounts of derivative instruments outstanding at year end, classified by type, and the changes in fair value of derivative instrument types for the year ended as reported in the financial statements are as follows:

<b>Derivative Summary</b>						
As of June 30, 2017						
Expressed in thousands						
	<b>Changes in Fair Value</b>		<b>Fair Value at June 30, 2017</b>			
	<b>Financial Statement Classification</b>	<b>Amount</b>	<b>Financial Statement Classification</b>	<b>Amount</b>	<b>Notional Amount</b>	<b>Currency</b>
<b>Foreign Currency</b>						
<b>Forward Contracts</b>		\$ (7)		\$ (7)	2,121	AUD
		\$ 107		\$ 107	6,426	EUR
		\$ 293		\$ 293	4,916,610	JPY
	Investment Income	\$ 393	Derivative Instruments	\$ 393		
<b>Futures Contracts</b>	Investment Income	\$ 19,198	Derivative Instruments Payable	\$ (4,393)	\$1,042,357	
<b>TBA Mortgage</b>						
<b>Backed Securities</b>	Investment Income	\$ (173)	Derivative Instruments	\$ (173)	\$ 43,702	

The fair values of foreign currency forward contracts are estimated based on the present value of their estimated future cash flows. Futures, Options and TBA mortgage backed securities are exchange traded and their price is based on quoted market prices at year end. It is the TRGT policy to conduct derivative transactions through the custodian bank and high quality money center banks or brokerage firms. The credit risk of foreign currency forward contracts is managed by limiting the term of the forward contracts and restricting the trading to high quality banks. The credit risk of futures contracts is managed by maintaining a daily variation margin.

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**Alternative Investments:** The TRGT has investments in strategic lending, private equity funds and real estate with an estimated fair value of \$7,773,103 at June 30, 2017. Because these investments are not readily marketable, the estimated value is subject to uncertainty and, therefore, may differ from the value that would have been used had a ready market for the investments existed, and such differences could be material. Title to real property invested in by TRGT is held by real estate investment holding companies.

**Commitments:**

**Standby Commercial Paper Purchase Agreement:** The TRGT has agreed to serve as standby commercial paper purchaser for commercial paper issued by the Funding Board of the State of Tennessee. By serving as a standby commercial paper purchaser, the TRGT receives an annual fee of 25 basis points on the \$350 million maximum issuance under this agreement during times when both Moody's and Standard and Poor's investment ratings assigned to the State of Tennessee's general obligation bonds are Aaa and AAA respectively, 40 basis points during times when either Moody's or Standard and Poor's has assigned ratings of Aa and AA respectively, or 55 basis points during times when either Moody's or Standard and Poor's has assigned ratings lower than Aa and AA respectively. In the unlikely event that the TRGT would be called upon to purchase the commercial paper, the TRGT would receive interest at a rate equal to prime plus 75 basis points during the first 30 consecutive days, plus an additional 50 basis points for each consecutive 30 days thereafter, up to a maximum rate allowed by state law.

**Alternative Investments:** The TRGT had unfunded commitments of \$452,009,019 in private equity, strategic lending, and real estate commitments at year end.

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**TENNESSEE CONSOLIDATED RETIREMENT SYSTEM  
STATEMENT OF FIDUCIARY NET POSITION  
AS OF JUNE 30, 2017**

**ASSETS**

Cash and Cash Equivalents	\$24,768,074.86
Cash collateral for securities on loan	4,990,488,198.83

**Receivables**

Member receivable	31,696,230.64
Employer receivable	77,452,017.89

<b>Total receivables</b>	<b>109,148,248.53</b>
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**Investments, at fair value**

Tennessee Retiree Group Trust	46,886,335,337.15
Capital Assets (net)	24,320,120.01

<b>TOTAL ASSETS</b>	<b>52,035,059,979.38</b>
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**LIABILITIES**

**Accounts payable**

Death benefits and refunds payable	3,787,835.32
Federal withholding payable	17,510,441.77
Retiree insurance premium payable	8,814,181.92
Other	207,684.14

Cash collateral for securities on loan	4,990,488,198.83
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<b>TOTAL LIABILITIES</b>	<b>5,020,808,341.98</b>
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<b>NET POSITION RESTRICTED FOR PENSIONS</b>	<b>\$47,014,251,637.40</b>
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*See Accompanying Notes to the Financial Statements*

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**TENNESSEE CONSOLIDATED RETIREMENT SYSTEM  
STATEMENT OF CHANGES IN FIDUCIARY NET POSITION  
FOR THE YEAR ENDED JUNE 30, 2017**

**ADDITIONS**

**Contributions**

Member contributions	\$317,296,895.76
Employer contributions	1,008,396,915.87
Other contributions	2,457,723.10
<b>Total contributions</b>	<u>1,328,151,534.73</u>

**Investment income**

Total investment income	4,877,585,997.34
Less: Investment expense	(54,002,916.06)
<b>Net income (loss) from investing activities</b>	<u>4,823,583,081.28</u>

**Securities lending activities**

Securities lending income	57,709,303.10
Less: securities lending expense	(32,345,174.15)
<b>Net income from securities lending activities</b>	<u>25,364,128.95</u>

**Net investment income**

4,848,947,210.23

**TOTAL ADDITIONS**

6,177,098,744.96

**DEDUCTIONS**

Annuity benefits	2,404,729,598.75
Death benefits	5,871,023.64
Refunds	39,943,709.76
Administrative expenses	18,512,076.17

**TOTAL DEDUCTIONS**

2,469,056,408.32

**NET INCREASE**

3,708,042,336.64

**NET POSITION RESTRICTED FOR PENSIONS**

**BEGINNING OF YEAR**

43,306,209,300.76

**END OF YEAR**

\$47,014,251,637.40

*See Accompanying Notes to the Financial Statements*

0.00

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**Tennessee Consolidated Retirement System**  
**Notes to Financial Statements**  
**June 30, 2017**

The Tennessee Consolidated Retirement System (TCRS) is a public employee retirement system comprised of defined benefit pension plans covering Tennessee state employees, employees of the state's higher education systems, teachers, and employees of political subdivisions in Tennessee. The TCRS was established in 1972 by a statutory enactment of the Tennessee General Assembly. The provisions of the TCRS are codified in *Tennessee Code Annotated* Title 8, Chapters 34-37. In accordance with Tennessee Code Annotated Title 8, Chapter 34, Section 202, all funds invested, securities, cash, and other property of the TCRS are held in trust and can be expended only for the purposes of the trust. Although the assets for all pension plans within the TCRS are commingled for investment purposes, the assets of each separate plan may legally be used only for the payment of benefits to the members of that plan and for its administration, in accordance with the terms of the plan.

**A: Summary of Significant Accounting Policies**

**Reporting entity:** The TCRS is included in the State of Tennessee financial reporting entity. Because of the state's fiduciary responsibility, the TCRS has been included as a pension trust fund in the *Tennessee Comprehensive Annual Financial Report*.

**Measurement focus and basis of accounting:** The accompanying financial statements have been prepared in accordance with generally accepted accounting principles (GAAP) as prescribed by the Governmental Accounting Standards Board (GASB). The financial statements have been prepared using the flow of economic resources measurement focus and the accrual basis of accounting. Under the accrual method, revenues are recorded when earned, and expenses are recorded at the time liabilities are incurred regardless of the timing of related cash flows.

Plan member and employer contributions are recognized in the period of time for which they are due, in accordance with legal provisions. Benefits and refunds are recognized when due and payable in accordance with the terms of each plan.

**Cash and cash equivalents:** Cash and cash equivalents includes cash, short-term investments with a maturity date within three months of the acquisition date, cash management pools, and cash invested in a short-term, open-end mutual fund under the contractual arrangement for master custody services. Cash received by the TCRS, that cannot be invested immediately in securities or is needed for operations, is invested in the State Pooled Investment Fund sponsored by the State of Tennessee and administered by the State Treasurer.

**Method used to value investments:** Assets of the TCRS are invested in the Tennessee Retiree Group Trust (TRGT). As of June 30, 2017, the TCRS owns 99.75 percent of the investments in the TRGT. The TRGT is not registered with the Securities and Exchange Commission (SEC) as an investment company. The State of Tennessee has not obtained a credit quality rating for the TRGT from a nationally recognized credit ratings agency. The fair value of investment positions in the TRGT is determined daily based on the fair value of the pool's underlying portfolio. Furthermore, the State had not obtained or provided any legally binding guarantees to support the value of participant shares during the fiscal year. There are no restrictions on the sale or redemption of shares.

Investments are reported at fair value. Securities traded on a national exchange are valued at the last reported sales price. Investment income consists of realized and unrealized appreciation (depreciation) in the fair value of investments and interest and dividend income. Interest income is recognized when earned. Securities and securities transactions are recorded in the financial statements on trade-date basis.

The fair value of assets of the TRGT held at June 30, 2017 represents the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. Assets held are categorized for fair value measurement within the fair value hierarchy established by GAAP. The hierarchy is based on the valuation inputs used to measure the fair value of the asset and give the highest priority to

unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements).

- Level 1 - Unadjusted quoted prices for identical assets or liabilities in active markets that can be accessed at the measurement date.
- Level 2 - Quoted prices for similar assets or liabilities in active markets; quoted prices for identical or similar assets or liabilities in markets that are not active; assets or liabilities that have a bid-ask spread price in an inactive dealer market, brokered market and principal-to-principal market; and Level 1 assets or liabilities that are adjusted.
- Level 3 - Valuations derived from valuation techniques in which significant inputs are unobservable.

Investments where fair value is measured using the Net Asset Value ("NAV") per share have no readily determinable fair value and have been determined to be calculated consistent with FASB principles for investment companies.

Where inputs used in the measurement of fair value fall into different levels of the hierarchy, fair value of the instrument in its entirety are categorized based on the lowest level input that is significant to the valuation. This assessment requires professional judgement and as such management developed a fair value committee that worked in conjunction with our custodian and investment professionals to make these valuations. All assets held were valued individually and aggregated into classes so to be represented in the table below.

Short-term securities generally include investments in money market-type securities reported at cost plus accrued interest.

Equity and equity derivative securities classified in Level 1 are valued using last reported sales prices quoted in active markets that can be accessed at the measurement date. Equity and equity derivative securities classified in Level 2 are securities whose values are derived daily from associated traded securities. Equity securities classified in Level 3 are valued with last trade data having limited trading volume.

US Treasury Bills, Bonds, Notes and Futures classified in Level 1 are valued using last reported sales prices quoted in active markets that can be accessed at the measurement date. Debt and debt derivative securities classified in Level 2 are valued using a bid-ask spread price from multiple independent brokers, dealers, or market principals, which are known to be actively involved in the market. Level 3 debt securities are valued using proprietary information, a single pricing source, or other unobservable inputs related to similar assets or liabilities.

Real estate investments classified in Level 3 are valued using the last valuations provided by external investment advisors or independent external appraisers. Generally, all direct real estate investments are appraised by a qualified independent appraiser(s) with the professional designation of Member of the Appraisal Institute ("MAI"), or its equivalent, every three (3) years beginning from the acquisition date of the property. The appraisals are performed using generally accepted valuation approaches applicable to the property type.

Investments in private mutual funds, traditional private equity funds, strategic lending funds and real estate funds that report using GAAP, the fair value, as well as the unfunded commitments, was determined using the prior quarter's NAV, as reported by the fund managers, plus the current cash flows. These assets were then categorized by investment strategy. In instances where the fund investment reported using non-GAAP standards, the investment was valued using the same method, but was classified in Level 3.

## Investments Measured at Fair Value

As of June 30, 2017

Expressed in Thousands

Investments at Fair Value Level	GAAP Hierarchy Level 1	GAAP Hierarchy Level 2	GAAP Hierarchy Level 3	NAV	Total Investments
Common Stock	22,203,415		42		22,203,457
Real Estate & REIT's	515,000		2,825,131	691,126	4,031,257
Limited Partnership Units	9,974		248,977	3,473,687	3,732,638
Mutual Funds	2,252,256			260,318	2,512,574
Real Estate Limited Partnership Units				18,189	18,189
Depository Receipts	79,036				79,036
Rights	647				647
Warrants	25				25
US Government Issues	5,252,407	169,543			5,421,950
Agency Securities		3,037,478			3,037,478
Corporate Bonds		3,730,899	22,211		3,753,110
Municipals		124,409			124,409
Other Asset Backed		303,464	64,033		367,497
CMO's		656,702	76,790		733,492
Auto Loans and Receivables		158,417			158,417
Preferred Stock	58,009	6,210			64,219
Derivative Instruments			393		393
<b>TOTAL INVESTMENTS AT FAIR VALUE</b>	<b>30,370,769</b>	<b>8,187,122</b>	<b>3,237,577</b>	<b>4,443,320</b>	<b>46,238,788</b>
Cash and Cash Equivalents					625,725
Cash Collateral on Loaned Securities					5,003,218
Other Receivables					79,317
Investment Income Receivable					149,815
Futures Receivable					104,917
<b>TOTAL FINANCIAL STATEMENT ASSETS</b>					<b>52,201,780</b>

The following table sets forth the additional disclosures of the TRGT's investments, which are stated at fair value based on the net asset value "NAV" (expressed in thousands), as a practical expedient, reported by the investment managers or general partners:

Asset Classification	Strategy	Number of Funds	NAV	Remaining Life	Redemption Terms	Redemption Restrictions
Limited Partnerships	Traditional Private Equity and Strategic Lending	72	3,527,432	Various	N/A	Various transfer and sale restrictions
Mutual Funds	International Public Equities	23	260,319	N/A	May Redeem all or part of the shares with at least fifteen (15) days written notice	Redemptions may be distributed in cash, in-kind or a combination and are subject to further restrictions by the fund's trustees
Real Estate Limited Partnerships	Real Estate Commingled Investments	17	691,126	N/A	N/A	Various transfer and sale restrictions

**Traditional Private Equity and Strategic Lending:** The private equity asset class is categorized into two component portfolios: traditional and strategic lending. Generally speaking, the types of private equity strategies include: venture capital, buyout, natural resource, secondary, special situations, tactical, structured credit, and high yield debt. The majority of these investments have an approximate life of 10 years or greater and are considered illiquid. During the life of the partnerships, distributions are received as underlying

partnership investments are realized. Transfer or sale of the partnership interest are restricted over the life of the partnership. The TRGT has no plans to liquidate any of these investments.

**International Public Equities using Mutual Funds:** TRGT will invest in mutual funds as an efficient and cost-effective means to gain passive exposure to a specific sector, industry or country. As of June 30, 2017, TRGT has retained Baring International Investment Limited to facilitate an international equity investment strategy utilizing, in part, sector and country index mutual funds.

**Real Estate Commingled Investments:** The real estate asset class is comprised of two different investment types: direct investments and commingled investments. A commingled investment is a pooled investment vehicle comprised of real estate investments that is overseen by an external investment manager or general partner. Generally speaking, the commingled real estate investment strategies include: office, retail, industrial, multi-family, and diversified. The majority of these investments have an approximate life of 10 years or greater and are considered illiquid. During the life of the pooled investment vehicle, distributions are received as underlying investments are realized. Transfer or sale of the interest are restricted over the life of the investment. The TRGT has no plans to liquidate any of these investments.

**Capital assets:** Capital assets consist of internally generated computer software, reported at historical cost less any applicable amortization. Capital assets are defined by the state as assets with an initial individual cost of \$5,000 or more and an estimated useful life in excess of two years. The computer software was valued at \$31.7 million at year end and is being amortized using the straight line method over the ten year estimated life of the system. The amortization expense for the current year was \$3.7 million.

## **B: Plan Descriptions**

**Plan administration:** The Tennessee Treasury Department, an agency in the legislative branch of state government, administers the plans of the TCRS.

At June 30, 2017, there were three defined benefit pension plans within the TCRS. The Public Employee Retirement Plan is an agent, multiple-employer defined benefit pension plan for state government employees and for political subdivisions electing to participate in the TCRS. The Teacher Legacy Pension Plan is a cost-sharing, multiple-employer defined benefit pension plan for teachers of local education agencies (LEAs). The Teacher Legacy Pension Plan closed to new membership on June 30, 2014, but will continue providing benefits to existing members and retirees. Beginning July 1, 2014, the Teacher Retirement Plan became effective for teachers employed by LEAs after June 30, 2014. The Teacher Retirement Plan is a separate cost sharing, multiple employer defined benefit pension plan.

The general administration and responsibility for proper operation of the TCRS plans are vested in a 20 member Board of Trustees, consisting of 18 voting members and two non-voting members. The Board has nine ex-officio members, two of whom are non-voting. The seven voting ex-officio members are the State Treasurer, Secretary of State, Comptroller of the Treasury, Commissioner of Finance and Administration, Commissioner of Human Resources, Director of the TCRS, and the Administrative Director of the Courts. The two non-voting ex-officio members are the chair and vice-chair of the Legislative Council on Pensions and Insurance.

Three active teacher members, one from each grand division of the state, and a retired teacher member are selected for three year terms by the Speaker of the House of Representatives and the Speaker of the Senate. Two active state employee members, who are from departments other than those represented by ex-officio members, are elected by state employees for three year terms. A board member is appointed for a two year term by each of the following organizations: Tennessee County Services, Tennessee Municipal League, and the Tennessee County Officials Association. Two members, a public safety employee and a retired state employee, are appointed by the Governor for two year terms. All members must be vested members of the TCRS, except for ex-officio members.

**Plan membership:** At June 30, 2017 the membership of the pension plans consisted of the following:

	Public Employee Retirement Plan	Teacher Retirement Plan	Teacher Legacy Pension Plan	Total
Inactive plan members or beneficiaries currently receiving benefits	100,011	1	49,336	149,348
Inactive employees entitled to but not yet receiving benefits	113,649	1,690	30,630	145,969
Active plan members	136,524	11,079	65,458	213,061
<b>Total membership</b>	<b>350,184</b>	<b>12,770</b>	<b>145,424</b>	<b>508,378</b>
Number of participating employers	576	146	146	722

*Membership above includes all plans whether open or closed.*

**Benefits provided:** The TCRS provides retirement, disability, and death benefits. The benefits of the TCRS are established by state law (Tennessee Code Annotated, Title 8, Chapters 34-37). In general, the benefits may be amended prospectively by the General Assembly for employees becoming members of the TCRS after June 30, 2014. Amendments of benefits for employees becoming members before July 1, 2014 can be restricted by precedent established by the Tennessee Supreme Court.

#### ***Teacher Legacy Pension Plan***

Members of the Teacher Legacy Pension Plan are eligible to retire at age 60 with 5 years of service credit or after 30 years of service credit regardless of age. Plan members are entitled to receive unreduced service retirement benefits, which are determined by a formula using the member's highest five consecutive year average compensation and the member's years of service credit. Service related disability benefits are provided regardless of length of service. Five years of service is required for non-service related disability eligibility. The service related and non-service related disability benefits are determined in the same manner as a service retirement benefit but are reduced 10 percent and include projected service credits. A variety of death benefits are available under various eligibility criteria. Member and beneficiary annuitants are entitled to automatic cost of living adjustments (COLAs) after retirement. A COLA is granted each July for annuitants retired prior to the 2<sup>nd</sup> of July of the previous year. The COLA is based on the change in the consumer price index (CPI) during the prior calendar year, capped at 3 percent, and applied to the current benefit. No COLA is granted if the change in the CPI is less than one-half percent. A one percent COLA is granted if the CPI change is between one-half percent and one percent.

#### ***Teacher Retirement Plan***

Members of the Teacher Retirement Plan are eligible to retire at age 65 with 5 years of service credit or pursuant to the rule of 90 where age and years of service total 90. Plan members are entitled to receive unreduced service retirement benefits, which are determined by a formula using the member's highest five consecutive year average compensation and the member's years of service credit. Service related disability benefits are provided regardless of length of service. Five years of service is required for non-service related disability eligibility. The service related and non-service related disability benefits are determined in the same manner as a service retirement benefit but are reduced 10 percent and include projected service credits. A variety of death benefits are available under various eligibility criteria. Member and beneficiary annuitants are entitled to automatic cost of living adjustments (COLAs) after retirement. A COLA is granted each July for annuitants retired prior to the 2<sup>nd</sup> of July of the previous year. The COLA is based on the change in the consumer price index (CPI) during the prior calendar year, capped at 3 percent, and applied to the current benefit. No COLA is granted if the change in the CPI is less than one-half

percent. A one percent COLA is granted if the CPI change is between one-half percent and one percent. The Teacher Retirement Plan includes provisions to control employer contributions and unfunded liabilities. As such, plan provisions are automatically changed when employer contributions and unfunded liabilities exceed statutory limits.

### ***Public Employee Retirement Plan***

For state employees, there are two major tiers of benefits and eligibility requirements. State employees becoming members before July 1, 2014 are eligible to retire at age 60 with 5 years of service credit or after 30 years of service credit regardless of age. State employees becoming members after June 30, 2014 are eligible to retire at age 65 with five years of service or pursuant to the rule of 90 where age and years of service total 90. Plan members are entitled to receive unreduced service retirement benefits, which are determined by a formula using the member's highest five consecutive year average compensation and the member's years of service credit. Service related disability benefits are provided regardless of length of service. Five years of service is required for non-service related disability eligibility. The service related and non-service related disability benefits are determined in the same manner as a service retirement benefit but are reduced 10 percent and include projected service credits. A variety of death benefits are available under various eligibility criteria. Member and beneficiary annuitants are entitled to automatic COLAs after retirement. A COLA is granted each July for annuitants retired prior to the 2<sup>nd</sup> of July of the previous year. The COLA is based on the change in the CPI during the prior calendar year, capped at 3 percent, and applied to the current benefit. No COLA is granted if the change in the CPI is less than one-half percent. A one percent COLA is granted if the CPI change is between one-half percent and one percent. There are additional classes of employees that include state judges, elected members of the general assembly, and public safety officers which have different benefit structures and eligibility requirements. These classifications represent an immaterial percentage of the state employee membership.

For political subdivision employees, there are various tiers of benefits and eligibility requirements. Each political subdivision adopts the benefit structure that the entity provides to its employees. Unreduced service retirement benefits are determined using a multiplier of the member's highest 5 consecutive year average compensation multiplied by the member's years of service credit. Plan members are eligible for service related disability benefits regardless of length of service. Five years of service is required for non-service related disability eligibility. The service related and non-service related disability benefits are determined in the same manner as a service retirement benefit but are reduced 10 percent and include projected service credits. A variety of death benefits are available under various eligibility criteria. If adopted as a benefit provision by the political subdivision, member and beneficiary annuitants are entitled to automatic COLAs after retirement. A COLA is granted each July for annuitants retired prior to the 2<sup>nd</sup> of July of the previous year. The COLA is based on the change in the CPI during the prior calendar year, capped at 3 percent, and applied to the current benefit. No COLA is granted if the change in the CPI is less than one-half percent. A one percent COLA is granted if the CPI change is between one-half percent and one percent. There are additional classes of employees, local judges, elected officials, and public safety officers, which may have different benefit structures and eligibility requirements. These classifications represent an immaterial percentage of the political subdivisions' membership.

***Contributions:*** Pursuant to *Tennessee Code Annotated* Title 8, Chapter 37, the Board of Trustees adopted an actuarially determined contribution (ADC) for each participating employer, as recommended by an independent actuary following an actuarial valuation.

For the Teacher Legacy Pension Plan, LEAs are required by statute to contribute the ADC. The ADC is the estimated amount necessary to finance the costs of benefits earned by plan members during the year, the unfunded accrued liability, and the cost of administration. Teachers are required by statute to contribute 5 percent of salary. For the year ended June 30, 2017, the required ADC for LEAs was 9.04 percent of covered-employee payroll.

For the Teacher Retirement Plan, LEAs are required by statute to contribute greater of the ADC or 4 percent. The ADC is the estimated amount necessary to finance the costs of benefits earned by plan members during the year, the unfunded accrued liability, and the cost of administration. Teachers are required by statute to contribute 5 percent of salary. For the year ended June 30, 2017, the required ADC for LEAs was 1.19 percent of covered-employee payroll while actual contributions were 4 percent of covered-employee payroll.

For the Public Employee Retirement Plan, each governmental entity is required by statute to contribute the ADC except that the contribution rate for state employees hired after June 30, 2014 is the greater of the ADC or 4 percent. The ADC is the estimated amount necessary to finance the costs of benefits earned by plan members during the plan year, the unfunded accrued liability, and the cost of administration. For the year ended June 30, 2017, the required ADC varied for each participating employer, with approximately ninety-six percent of all employer rates less than twenty (20) percent and contributions from these same employers accounting for over ninety percent of the contributions for this plan. By statute, state employees hired before July 1, 2014 are noncontributory while employees hired after June 30, 2014 contribute 5 percent of salary. As adopted by the governmental entity, political subdivision employees may be noncontributory, contribute 2.5 percent of salary, or contribute 5 percent of salary.

**Reserves:** The statute governing the Teacher Retirement Plan and certain employers in the Public Employee Retirement Plan provide for a minimum employer contribution rate of 4 percent. The statute further provides that the amount of the employer contributions in excess of the actuarially determined contribution rate is deposited into a stabilization reserve for each plan. The statute may be amended by the Tennessee General Assembly. Assets in the stabilization reserve are commingled for investment purposes and receive a pro rata share of investment earnings. The amount in the stabilization reserve is not considered in calculating the actuarially determined employer contribution rate for each plan. The statute provides that the assets in the stabilization reserve will be utilized should the actuarially determined contribution rate exceed 4 percent. In such case, the required employer contribution in excess of 4 percent will be transferred from the stabilization reserve to the account of the Teachers Retirement Plan or certain Public Employee Retirement Plan employers. By statute, the Board of Trustees may adopt a policy to suspend the deposits into the stabilization reserve in any given year when the stabilization reserve reaches a certain level that is determined by the Board. If deposits are suspended, then the employer contribution will be the actuarially determined contribution rate for that year rather than the higher 4 percent. The Board has not adopted a policy at this time. At June 30, 2017, there was \$27,700,444 in the stabilization reserve on behalf of the Teachers Retirement Plan and \$24,354,549 in the various stabilization reserves on behalf of the Public Employee Retirement Plan.

## **C: Deposits and Investments**

**Statutory Authority:** The Tennessee Retiree Group Trust (TRGT) was established in 2015 by a statutory enactment of the Tennessee General Assembly. The provisions of the TRGT are codified in *Tennessee Code Annotated* (TCA) Title 8, Chapters 34-37. Pursuant to this statute the Tennessee Consolidated Retirement System (TCRS) and its board of directors with the State Treasurer (Treasurer) as custodian, authorized by TCA 8-37-104 adopted this group trust for the purpose of pooling funds of TRGT with other assets in the custody of the Treasurer, solely for investment purposes. The assets invested consist exclusively of assets of exempt pension and profit sharing trusts and individual retirement accounts, custodial accounts, retirement income accounts, governmental plans and tax-exempt trusts under the Internal Revenue Code of 1986 and Rev. Rul. 81-100, as modified by Rev. Ruls. 2004-67, 2008-40 and 2011-1 (referred to herein as "Retirement Assets"). The Custodian shall be responsible for the managing and directing the investment of the Group Trust Funds in the same manner as it invests funds of the TCRS. As of June 30, 2017, the TCRS owns 99.75 percent of the investments in the TRGT.

The TRGT is authorized to invest in securities in accordance with the investment policy of the TCRS. That policy allows the Trust to invest in bonds, debentures, preferred stock and common stock, real estate and in other good and solvent securities subject to the approval of the Board of Trustees, but further subject to the following statutory restrictions and provisions:

- a. The total sum invested in common and preferred stocks shall not exceed seventy-five percent (75 percent) of the total of the funds of the trust.
- b. The total sum invested in notes and bonds or other fixed income securities exceeding one year in maturity shall not exceed seventy-five percent (75 percent) of the total funds of the trust.
- c. Within the restrictions in (a) and (b) above, an amount not to exceed twenty-five percent (25 percent) of the total of the funds of the retirement system may be invested in securities of the same

kinds, classes, and investment grades as those otherwise eligible for investment in various approved foreign countries, provided that such percentage may be increased by the board with the subsequent approval of the council on pensions and insurance.

- d. Within the restrictions in (a) and (b) above, funds may be invested in Canadian securities which are substantially of the same kinds, classes and investment grades as those otherwise eligible for investment.
- e. The total amount of securities loaned under a securities lending program cannot exceed thirty percent (30 percent) of total assets.
- f. The total sum invested in real estate shall not exceed ten percent (10 percent) of the market value of total assets.
- g. The total sum invested in private equities shall not exceed ten percent (10 percent) of the market value of total assets.

State statute also authorizes the TRGT to invest in forward contracts to hedge its foreign currency exposure and to purchase or sell domestic equity index futures contracts for the purpose of asset allocation relating to the domestic equity portfolio. The total amount of the financial futures contract obligation shall not exceed ten percent (10 percent) of the market value of the TRGT's total assets. Gross exposure to approved fixed income financial instruments will be limited to ten percent (10 percent) of the market value of the Trust's total assets for risk mitigating positions and 10 percent (10 percent) for risk positions. Position sizes will be measured by notional amounts. Options will be measured in their notional equivalents.

**Investment policy:** The TRGT investment authority is established pursuant to Tennessee Code Annotated Title 8, Chapter 37. The statute provides the Board of Trustees with the responsibility to establish the investment policy of the TRGT. The investment policy may be amended by the Board. The TRGT assets are managed on a total return basis with a long-term objective of achieving and maintaining a fully funded status for the benefits provided by the TCRS. The following was the Board's adopted asset allocation policy as of June 30, 2017:

<u>Authorized Asset Class</u>	<u>Target Allocation</u>
U.S. equity	31%
Canadian equity	2%
Developed market international equity	13%
Emerging market international equity	4%
Private equity	7%
U.S. fixed income	25%
Strategic lending	7%
Real estate	10%
Short-term securities	1%
Total	100%

**Securities Lending:** The TRGT is authorized to invest in securities lending investments by TCA 8-37-104(a)(6) with the terms established in the investment policy whereby TRGT loans securities to brokers and dealers (borrower) and in turn, TRGT receives collateral as either cash or securities. TRGT pays the borrower interest on the collateral received and invests the collateral with the goal of earning a higher yield than the interest rate paid to the borrower. Loans are limited to no more than thirty percent (30%) of the market value of the total assets in the TRGT portfolio and provided further that such loans are secured by collateral. Securities received as collateral hereunder shall have a market value equal to at least one hundred two percent (102%) of the market value of the loaned domestic security or one hundred five percent (105%) of any foreign security. Cash received as collateral shall equal at least one hundred percent (100%) of the

market value of the loaned securities and may be invested by or on behalf of the TRGT in any instrument the TRGT may be directly invested. Cash Collateral is held in the TRGT name and is not subject to custodial credit risk. During the year there were no violations of legal or contractual provisions by the TRGT.

The TRGT securities lending program is managed by a third party lending agent, Deutsche Bank AG. The TRGT may loan any debt or equity securities which is owned by TRGT. At June 30, 2017, the TRGT had the following securities on loan and received the collateral as shown below:

**Securities Lending**

**As of June 30, 2017**

**Fair Value of Securities on Loan**

<u>Securities on Loan</u>	<u>Fair Value of Securities on Loan</u>	<u>Cash/Non-Cash Collateral Received</u>
Fixed	\$2,199,334,136	\$2,246,041,260
Equity	2,866,817,317	2,927,699,742
Total	\$5,066,151,453	\$5,173,741,002

The TCRS has the ability to sell the collateral securities only in the case of a borrower default.

**Credit Risk:** Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. The credit quality distribution for the TRGT's investments in fixed income securities at year end is included in the schedule below. Securities are rated using Standard and Poor's and/or Moody's and are presented below using the Standard and Poor's rating scale. The State Pooled Investment Fund has not obtained a credit quality rating from a nationally recognized credit ratings agency.

TRGT's investment policy specifies that bond issues subject for purchase are investment grade bonds rated by one of the Nationally Recognized Statistical Rating Organizations (NRSROs). There is no requirement to divest an asset if it is downgraded after purchase. For short-term investments, the investment policy provides for the purchase of only the highest quality debt issues. Commercial paper should be rated in the highest tier by all rating agencies which rate the paper, with a minimum of two ratings required. Commercial paper cannot be purchased if a rating agency has the commercial paper on a negative credit watch. The investment policy also requires preparation of a credit analysis report on the corporation prior to purchasing commercial paper.

As noted below, the TRGT does not utilize its own bank accounts but invests in the State Pooled Investment Fund for its operating cash purposes. Required risk disclosures relative to the State Pooled Investment Fund are presented in the State of Tennessee Treasurer's Report. That report is available on the state's website at <http://www.tn.gov/treasury/>.

At June 30, 2017, the TRGT had the following investments:

<b>Credit Quality Distribution for Securities with Credit Exposure as a percentage of Total Investments</b>		
<b>As of 6/30/2017</b>		
<i>Expressed in Thousands</i>		
<b>Rating</b>	<b>Fair Value</b>	<b>Percentage of Total Investments</b>
P-1	\$ 3,059	0.007%
AAA	489,032	1.058%
AA	389,599	0.843%
A	881,900	1.907%
BBB	2,338,128	5.057%
BB	274,236	0.593%
B	63,729	0.138%
CCC	55,459	0.120%
CC	871	0.002%
D	25,659	0.055%
NR	3,529,507	7.633%
	<b>\$ 8,051,179</b>	
U. S. Government Agencies and Obligations explicitly guaranteed by the U. S. Government	6,116,004	
<b>Total Fixed Income Securities</b>	<b>\$ 14,167,183</b>	
Equity	24,805,713	
Real Estate	4,049,446	
Private Equities	1,862,282	
Strategic Lending	1,860,382	
Preferred Stock not Classified as Fixed Income	64,219	
Derivative Instruments (not rated)	393	
Add Back Short term investment fund with custodian (NR)	(3,005)	
Add Back Short term investments classified as cash (NR)	(567,825)	
<b>Total Investments as shown on Fiduciary Net Position</b>	<b>\$ 46,238,788</b>	

**Interest Rate Risk:** Interest rate risk is the risk that future changes in prevailing market rates of interest will have an adverse effect on the fair value of debt investments. The fair values of securities with long terms to maturity may be highly sensitive to interest rate changes. The investment policy for the TRGT states that the maturity of its debt securities may range from short-term instruments, including investments in the State Pooled Investment Fund, to long-term bonds, with consideration of liquidity needs. However, the policy does not specifically address limits on investment maturities. Duration is a measure of a debt investment's exposure to fair value changes arising from changing interest rates. It uses the present value of cash flows weighted for those cash flows as a percentage of the investment's full price. The TRGT had the following investments and effective duration at June 30, 2017.

<b>Effective Duration of Debt Investments</b>		
<b>As of June 30, 2017</b>		
Expressed in Thousands		
<b>Investment Type</b>	<b>Fair Value As of June 30, 2017</b>	<b>Effective Duration (years)</b>
Government Agencies	\$413,913	1.92
Government Bonds	3,690,363	13.87
Government Inflation Indexed	1,618,067	7.88
Government Mortgage Backed	3,473,525	4.46
Government Asset Backed	46,243	5.19
Municipal Bonds	124,409	9.95
Commercial Mortgage Backed	297,445	1.94
Corporate Asset Backed Securities	479,670	1.07
Corporate Bonds	3,753,110	9.08
Short Term Investments	270,438	0.00
<b>Total Debt Investments</b>	<b>\$14,167,183</b>	<b>8.22</b>

**Asset-Backed Securities:** The TRGT invests in various collateralized mortgage obligations (CMOs) which are mortgage-backed securities. These securities are based on cash flows from interest and principal payments on underlying mortgages and could therefore be more sensitive to prepayments by mortgagees as a result of a decline in interest rates. The fair value of CMOs at June 30, 2017 was \$733,491,810 of which \$365,012,488 were CMOs that are generally more sensitive to interest rate changes.

**Foreign Currency Risk:** Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment or deposit. The investment policy limits the asset allocation for international investments to twenty-five percent of total assets. The TRGT's exposure to foreign currency risk was as follows:

<b>Foreign Currency-Denominated Investments</b>			
<b>As of June 30, 2017</b>			
Expressed in Thousands			
<b>Currency</b>	<b>Total Fair Value June 30, 2017</b>	<b>Equity</b>	<b>Cash</b>
Australian Dollar	\$335,353	\$335,022	\$331
British Pound Sterling	\$1,238,766	1,234,829	3,937
Canadian Dollar	\$1,027,138	1,026,139	999
Danish Krone	\$167,342	167,064	278
Euro Currency	\$2,030,838	2,017,503	13,335
Hong Kong Dollar	\$224,799	224,559	240
Japanese Yen	\$1,633,558	1,623,508	10,050
New Israeli shekel	\$13,954	13,843	111
New Zealand Dollar	\$10,887	10,626	261
Norwegian Krone	\$37,735	37,460	275
Singapore Dollar	\$85,027	84,877	150
Swedish Krona	\$180,566	180,139	427
Swiss Franc	\$614,822	613,645	1,177
<b>Total</b>	<b>\$7,600,785</b>	<b>\$7,569,214</b>	<b>\$31,571</b>

**Custodial Credit Risk:** Custodial Credit Risk for deposits is the risk that in the event of a bank failure, the TRGT deposits may not be returned to TRGT. The TRGT does not have an explicit policy with regards to Custodial Credit Risk for deposits. At year end, the TRGT had uninsured and uncollateralized cash deposits of \$36,571,026 in foreign currency held by our master custodian, State Street Bank, in State Street's name. These deposits were used for investments pending settlement.

**Rate of Return:** For the year, the money-weighted rate of return on investments in the TRGT, net of investment expense, was 11.295 percent. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

**Derivatives:**

**Futures** - The TRGT may buy or sell fixed income and equity index futures contracts for the purposes of making asset allocation changes in an efficient and cost effective manner and to improve liquidity. Gains (losses) on futures hedge losses (gains) produced by any deviation from the TRGT target allocation. The gains and losses resulting from daily fluctuations in the fair value of the outstanding futures contract are settled daily, on the following day, and a receivable or payable is established for any unsettled gain or loss as of the financial statement date. As of June 30, 2017, the TRGT was under contract for fixed income and equity index futures and the resulting payable is reflected in the financial statements at fair value.

**Foreign Currency Forward Contracts** - The international securities expose the TRGT to potential losses due to a possible rise in the value of the US dollar. The TRGT investment managers can reduce foreign currency exposure by selling foreign currency forward contracts, at agreed terms and for future settlement, usually within a year. The manager will reverse the contract by buying the foreign currency before the settlement date. A gain (loss) on this transaction pair will hedge a loss (gain) on the currency movement of the international security. The TRGT can sell up to 80% of its foreign currency exposure into US dollars. Foreign currency forward contracts expose the TCRS to foreign currency risk as they are denominated in foreign currency.

Any unrealized gain on foreign currency forward contracts has been reflected in the financial statements as an investment. The notional amount of the foreign currency forward contracts has been reflected in the financial statements as a receivable and a payable. Any unrealized loss on foreign currency forward contracts has been included in the payable established for the contracts.

**Mortgages** - The TRGT is authorized to invest in To Be Announced (TBA) mortgage backed securities similar to the foreign currency forward contracts. The TRGT enters into agreements to purchase pools of mortgage backed securities prior to the actual security being identified. The TRGT will roll this agreement prior to settlement date to avoid taking delivery of the security. Any unrealized gain on TBA mortgage backed securities has been reflected in the financial statements as an investment. Any unrealized loss on TBA mortgage backed securities has been included in the payable established for the mortgages. The notional amounts of these agreements have been included in the financial statements as a receivable and a payable. The TRGT invests in these derivatives to adjust its exposure to mortgage coupon risk and to replicate the return on mortgage backed securities portfolios without actually purchasing the security.

**Options** - The TRGT is authorized to enter into option contracts and any income earned on option contracts has been included in investment income in the financial statements.

The fair value balances and notional amounts of derivative instruments outstanding at year end, classified by type, and the changes in fair value of derivative instrument types for the year ended as reported in the financial statements are as follows:

<b>Derivative Summary</b>						
<b>As of June 30, 2017</b>						
Expressed in thousands						
	<b>Changes in Fair Value</b>			<b>Fair Value at June 30, 2017</b>		
	<b>Financial Statement</b>			<b>Financial Statement</b>	<b>Notional</b>	
	<b>Classification</b>	<b>Amount</b>		<b>Classification</b>	<b>Amount</b>	<b>Currency</b>
<b>Foreign Currency</b>						
<b>Forward Contracts</b>						
		\$ (7)		\$ (7)	2,121	AUD
		\$ 107		\$ 107	6,426	EUR
		\$ 293		\$ 293	4,916,610	JPY
	Investment Income	\$ 393		Derivative Instruments	\$ 393	
<b>Futures Contracts</b>						
	Investment Income	\$ 19,198		Derivative Instruments Payable	\$ (4,393)	\$ 1,042,357
<b>TBA Mortgage</b>						
<b>Backed Securities</b>						
	Investment Income	\$ (173)		Derivative Instruments	\$ (173)	\$ 43,702

The fair values of foreign currency forward contracts are estimated based on the present value of their estimated future cash flows. Futures, Options and TBA mortgage backed securities are exchange traded and their price is based on quoted market prices at year end. It is the TRGT policy to conduct derivative transactions through the custodian bank and high quality money center banks or brokerage firms. The credit risk of foreign currency forward contracts is managed by limiting the term of the forward contracts and restricting the trading to high quality banks. The credit risk of futures contracts is managed by maintaining a daily variation margin.

**Alternative Investments:** The TRGT has investments in strategic lending, private equity funds and real estate with an estimated fair value of \$7,773,103 at June 30, 2017. Because these investments are not readily marketable, the estimated value is subject to uncertainty and, therefore, may differ from the value that would

have been used had a ready market for the investments existed, and such differences could be material. Title to real property invested in by TRGT is held by real estate investment holding companies.

**Commitments:**

**Standby Commercial Paper Purchase Agreement:** The TRGT has agreed to serve as standby commercial paper purchaser for commercial paper issued by the Funding Board of the State of Tennessee. By serving as a standby commercial paper purchaser, the TRGT receives an annual fee of 25 basis points on the \$350 million maximum issuance under this agreement during times when both Moody's and Standard and Poor's investment ratings assigned to the State of Tennessee's general obligation bonds are Aaa and AAA respectively, 40 basis points during times when either Moody's or Standard and Poor's has assigned ratings of Aa and AA respectively, or 55 basis points during times when either Moody's or Standard and Poor's has assigned ratings lower than Aa and AA respectively. In the unlikely event that the TRGT would be called upon to purchase the commercial paper, the TRGT would receive interest at a rate equal to prime plus 75 basis points during the first 30 consecutive days, plus an additional 50 basis points for each consecutive 30 days thereafter, up to a maximum rate allowed by state law.

**Alternative Investments:** The TRGT had unfunded commitments of \$452,009,019 in private equity, strategic lending, and real estate commitments at year end.