

# State Teachers Retirement System of Ohio

Actuarial Valuation and Review as of  
July 1, 2013

Revised November 2013





101 NORTH WACKER DRIVE, SUITE 500 CHICAGO, IL 60606  
T 312.984.8500 F 312.984.8590 www.segalco.com

November 20, 2013

Board of Trustees  
State Teachers Retirement System of Ohio  
275 East Broad Street  
Columbus, Ohio 43215

Ladies and Gentlemen:

This report presents the results of the annual valuation of the assets and liabilities of The State Teachers Retirement System of Ohio (STRS Ohio or System) as of July 1, 2013, prepared in accordance with Section 3307.51 of Chapter 3307 of the Ohio Revised Code. This valuation takes into account all of the pension and survivor benefits to which members are entitled. A separate valuation of the retiree health care benefits provided by the System is performed as of January 1 of each year.

### **Benefit Provisions**

The actuarial valuation reflects the benefit and contribution provisions set forth in Chapter 3307 of the Ohio Revised Code. The benefits and members contributions were changed with the pension reform legislation passed in September 2012. Summary highlights of the pension reform changes include:

- Member contributions increase from 10% to 14%, phased in 1% per year beginning July 1, 2013, through July 1, 2016.
- Service credit requirements for retirement with an unreduced benefit will increase from 30 years to 35 years of service by August 1, 2023. Beginning August 1, 2026, a minimum age of 60 is required. This change will be phased in beginning August 1, 2015, when eligibility for unreduced benefits increases to 31 years of service. The service credit requirement increases by one year every other year (e.g., the eligibility requirement is 32 years at August 1, 2017, 33 years at August 1, 2019, etc.). An unreduced retirement benefit continues to be available at age 65 with a minimum of five years of service.
- Service credit requirements for an actuarially reduced benefit will increase from age 55 with 25 years of service to any age with 30 years of service by August 1, 2023. This change will be phased in beginning August 1, 2015, when eligibility for a reduced benefit increases to age 55 with 26 years of service or any age with 30 years of service. The service credit requirement increases by one year every other year (e.g., the eligibility requirement is age 55 with 27 years of service at August 1, 2017, age 55 with 28 years of service August 1, 2019, etc.). A retirement benefit continues to be available at age 60 with a minimum of five years of service; however, the benefit will be actuarially reduced beginning August 1, 2015.

- Final average salary is changed to be the average of the five highest years of earnings beginning August 1, 2015.
- The current 35-year enhanced benefit formula will be eliminated after July 1, 2015. The new benefit formula is 2.2% for all years of service.
- Members who retire before July 1, 2013, will not receive a cost-of-living adjustment (COLA) during the 2014 fiscal year. Members who retire effective July 1, 2013, will not receive a COLA on July 1, 2014. After missing one COLA, retirees will resume a COLA of 2% per year. Members retiring after July 1, 2013, will receive a 2% COLA, but it will not begin until the fifth anniversary of retirement.
- Members who are eligible to retire on July 1, 2015, will continue to maintain retirement eligibility if they continue working, and the benefit will be the greater of (a) the benefit calculated upon retirement under the new formula, or (b) the benefit as of July 1, 2015, under the prior formula.

#### **Actuarial Assumptions and Methods**

With the exception of the retirement rates, the valuation was based on the actuarial assumptions and methods as adopted by the Board of Trustees, reflecting the three-year experience review covering the period July 1, 2008 through June 30, 2011. The retirement rates were modified with this valuation to reflect the plan changes that were adopted with the pension reform legislation. The other actuarial methods are unchanged from the prior valuation.

The actuarial assumptions and methods comply with the parameters set forth in Governmental Accounting Standards Board Statement No. 25.

#### **Assets and Membership Data**

STRS Ohio reported to the actuary the individual data for members of the System as of the valuation date. The amount of assets in the trust fund taken into account in the valuation was based on statements prepared by STRS Ohio.

#### **Funding Adequacy**

The member and employer contribution rates are established by statute. The member contribution rate increased from 10% of salary to 11% of salary effective July 1, 2013. The member contribution rate is scheduled to increase to 12% of salary effective July 1, 2014, to 13% of salary effective July 1, 2015, and to 14% of salary effective July 1, 2016. The employer contribution rate is 14% of payroll. For fiscal 2014, the total contribution rate is 25% of payroll. The Board allocates the total contribution rate between pension and survivor benefits and health care. For fiscal 2014, the Board has allocated 1% toward health care, leaving 24% for pension and survivor benefits. The valuation indicates that the pension and survivor benefits contribution rate of 24% for fiscal 2014, increasing by 1% per year to 28% of payroll in fiscal 2017 and after is sufficient to provide for the payment of the pension and survivor benefits, as the funding period is 36.1 years (provided that the funding period decreases by one year in each future year.)

The valuation indicates that for the fiscal year ending June 30, 2013, the actuarial experience of STRS Ohio was somewhat favorable generating a net actuarial gain of \$17,755 million. This gain is the net result of a \$15,662 million decrease in actuarial accrued liability due to the pension reform changes, a \$2,483 million gain due to favorable investment return experience and a net \$391 million loss due to unfavorable demographic experience in fiscal 2013.

### **Financial Results**

This report shows detailed summaries of the financial results of the valuation used in preparing this valuation. The actuary prepared supporting schedules included in the Actuarial and Statistical Sections of the STRS Ohio Comprehensive Annual Financial Report. The actuary also prepared the trend data schedules included in the Financial Section of the STRS Ohio Comprehensive Annual Financial Report.


### **Actuarial Certification**

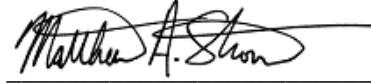
In preparing the results presented in this report, we have relied upon information STRS Ohio provided to us regarding the benefit provisions, System members, benefit payments and unaudited plan assets. While the scope of our engagement did not call for us to perform an audit or independent verification of this information, we have reviewed this information for reasonableness. The accuracy of the results presented in this report is dependent upon the accuracy and completeness of the underlying information.

All calculations have been made in conformity with generally accepted actuarial principles and practices, and with the Actuarial Standards of Practice issued by the Actuarial Standards Board. In our opinion, the results presented also comply with Chapter 3307 of the Ohio Revised Code, and, where applicable, the Internal Revenue Code, ERISA, and the Statements of the Governmental Accounting Standards Board. The undersigned are independent actuaries. Both are Fellows of the Society of Actuaries, Enrolled Actuaries, and Members of the American Academy of Actuaries, and both are experienced in performing valuations for large public retirement systems. They both meet the Qualification Standards of the American Academy of Actuaries.

Respectfully submitted,

Segal Consulting, a Member of the Segal Group

By:   
\_\_\_\_\_  
Kim Nicholl, FSA, MAAA, EA  
Senior Vice President and Actuary

  
\_\_\_\_\_  
Matthew A. Strom, FSA, MAAA, EA  
Consulting Actuary

## SECTION 1

### VALUATION SUMMARY

Significant Issues in the Valuation Year .....	1
Summary of Key Valuation Results .....	3

## SECTION 2

### VALUATION RESULTS

A. Member Data .....	5
B. Financial Information.....	10
C. Development Of Annual Required Contribution.....	17
D. 10 Year History of Principal Financial Results .....	18

## SECTION 3

### SUPPLEMENTAL INFORMATION

Membership Data .....	21
Exhibit A - Summary of Membership Data as of July 1, 2013.....	23
Exhibit B - Active Membership Data as of July 1, 2013 – Number And Average Annual Salary.....	25
Exhibit C - Retiree and Beneficiary Membership Data as of July 1, 2013.....	28
Exhibit D - 10-Year History of Membership Data .....	30
Exhibit E - 10-Year Payout Projection of Benefit Payments – Current Plan Benefits .....	31
Exhibit F –Reconciliation of Member Data by Status for the Year Ending June 30, 2013.....	32
Exhibit G - Statement of Change in Plan Net Assets for Year Ended June 30, 2013 .....	33
Exhibit H - Development of Unfunded Actuarial Accrued Liability .....	34
Exhibit I – Definitions of Pension Terms.....	35

## SECTION 4

### REPORTING INFORMATION

EXHIBIT I Schedule of Employer Contribution (GASB) .....	41
EXHIBIT II Schedule of Funding Progress (GASB) .....	42
EXHIBIT III Solvency Test.....	43
EXHIBIT IV Supplementary Information Required by the GASB .....	44
EXHIBIT V Summary of Assumptions and Methods .....	45
EXHIBIT VI Summary of Plan Provisions.....	53
EXHIBIT VII Summary of Plan Changes.....	68

## SECTION 1: Actuarial Valuation Summary as of July 1, 2013, for the State Teachers Retirement System of Ohio

---

### SIGNIFICANT ISSUES IN THE VALUATION YEAR

1. The employer contribution rate for the fiscal year beginning July 1, 2013, is equal to 14% of payroll of which 13% is allocated to pension and 1% to health care. The effective amortization period to fully amortize the unfunded actuarial accrued liability is 36.1 years.
2. The funded ratio based on the actuarial value of assets over the actuarial accrued liability as of July 1, 2013, is 66.3%, compared to 56.0% as of July 1, 2012. This ratio is a measure of funded status, its history is a measure of funding progress, and it is the ratio required to be reported under GASB 25. The increase in the member contribution rate and the changes in plan provisions are expected to improve the funded ratio of the System over time.
3. For the year ended June 30, 2013, Segal has determined that the asset return on a market value basis was 13.48%. After gradual recognition of investment gains and losses under the actuarial smoothing method, the actuarial rate of return was 12.11%. This represents an experience gain when compared to the assumed rate of 7.75%. As of June 30, 2013, the actuarial value of assets (\$62.6 billion) represented 95.7% of the market value (\$65.4 billion).
4. The portion of deferred investment gains and losses recognized during the calculation of the July 1, 2013, actuarial value of assets contributed to a gain of \$2,483 million. Conversely, the demographic and liability experience resulted in \$391 million loss.
5. The changes to the plan of benefits that arose from the 2012 pension reform are reflected in this actuarial valuation and decreased the unfunded actuarial accrued liability by \$15,662 million.
6. As page 10 of this report indicates, the total investment gain not yet recognized as of June 30, 2013, is \$2.8 billion. This unrecognized gain will be recognized in the determination of the actuarial value of assets for funding purposes in the next few years, to the extent they are not offset by recognition of losses derived from future experience. This means that earning the assumed rate of investment return of 7.75% per year (net of investment expenses) on a market value basis will result in investment gains on the actuarial value of assets in the next few years.
7. As mentioned above, the current method used to determine the actuarial value of assets yields an amount that is 95.7% of the market value of assets as of June 30, 2013. Guidelines in Actuarial Standard of Practice No. 44 (Selection and Use of Asset Valuation Methods for Pension Valuations) recommend that asset values fall within a reasonable range around the corresponding market value. The actuarial asset method complies with these guideline.

**SECTION 1: Actuarial Valuation Summary as of July 1, 2013, for the State Teachers Retirement System of Ohio**

---

8. The System's cash flow (contributions minus benefit payments, refunds, and expenses) as a percentage of the market value of assets is -6.0% as of June 30, 2013, compared to -5.7% as of June 30, 2012. The scheduled increases in the member contribution rates will slightly improve the cash flow percentage, assuming all other experience emerges as expected.
9. This actuarial valuation report as of June 30, 2013, is based on financial data as of that date. Changes in the value of assets subsequent to that date are not reflected. Declines in asset values will increase the cost of the System, while increases in asset values (in excess of expected) will decrease the cost of the System.

**SECTION 1: Actuarial Valuation Summary as of July 1, 2013, for the State Teachers Retirement System of Ohio**

**Summary of Key Valuation Results (\$ in thousands)**

	2013			2012 <sup>1</sup>
	Defined Benefit	Combined	Total	Total
<b>Membership Data</b>				
1. Number of Members				
a. Active Members				
(i) Defined Benefit	165,057	4,888	169,945	173,044
(ii) Defined Contribution	8,197	-	8,197	7,954
b. Reemployed Retirees	24,228	-	24,228	23,879
c. Inactive Members				
(i) Eligible for Allowances	16,716	365	17,081	17,325
(ii) Eligible for Refunds Only	134,933	1,172	136,105	134,974
d. Retirees and Beneficiaries	<u>149,138</u>	<u>83</u>	<u>149,221</u>	<u>143,256</u>
e. Total	498,269	6,508	504,777	500,432
2. Annualized Salaries (for period beginning July 1, 2013)	\$9,390,960	\$251,329	\$9,642,289	\$9,502,883
3. Membership Payroll				
a. STRS Defined Benefit Plan Members	\$9,681,125	\$236,786	\$9,917,911	10,102,509
b. STRS Defined Contribution Plan Members	279,054	-	279,054	256,812
c. Alternative Retirement Plan Members	<u>568,670</u>	<u>-</u>	<u>568,670</u>	<u>519,754</u>
d. Total	\$10,528,849	\$236,786	\$10,765,635	\$10,879,075
4. Annual Allowances	\$6,189,547	\$635	\$6,190,182	\$5,815,407
<b>Valuation Results</b>				
5. Actuarial Accrued Liability				
a. Active Members	\$23,735,393	\$130,573	\$23,865,966	\$35,790,377
b. Reemployed Retirees	384,253	-	384,253	394,325
c. Inactive Members	1,350,299	4,207	1,354,506	1,438,262
d. Retirees and Beneficiaries				
(i) Annuity and Pension Reserve Fund	66,950,757	6,967	66,957,724	66,970,288
(ii) Survivors' Benefit Fund	<u>1,117,716</u>	<u>-</u>	<u>1,117,716</u>	<u>1,140,887</u>
(iii) Subtotal	68,068,473	6,967	68,075,440	68,111,175
e. Total	\$93,538,418	\$141,748	\$93,680,166	\$105,734,139
6. Defined Contribution Account Balances	<u>686,528</u>	<u>-</u>	<u>686,528</u>	<u>567,702</u>
7. Total Actuarial Accrued Liability	\$94,224,946	\$141,748	\$94,366,694	\$106,301,841



**SECTION 1: Actuarial Valuation Summary as of July 1, 2013, for the State Teachers Retirement System of Ohio**

**Summary of Key Valuation Results (continued) (\$ in thousands)**

	2013			2012 <sup>1</sup>
	Defined Benefit	Combined	Total	Total
<b>Valuation Results</b>				
8. Total Actuarial Accrued Liability	\$92,224,946	\$141,748	\$94,366,694	\$106,301,841
9. Actuarial Value of Pension Assets			<u>62,590,786</u>	<u>59,489,508</u>
10. Unfunded Actuarial Accrued Liability			\$31,775,907	\$46,812,333
11. Funding Period <sup>2</sup>			36.1 years	Infinite
12. Funded Status			66.3%	56.0%
13. Normal Cost Rate	11.97%	4.83%	11.79%	15.72%
14. Member Contribution Rate	11.00%	1.00%	10.76%	9.78%
<b>Allocation of Employer Contribution Rate</b>				
15. Employer Contribution Rate				
a) Normal	0.97%	3.83%	1.03%	5.94%
b) Unfunded Actuarial Accrued Liability	<u>12.03%</u>	<u>9.17%</u>	<u>11.97%</u>	<u>7.06%</u>
c) Total Pension	13.00%	13.00%	13.00%	13.00%
d) Health Care	<u>1.00%</u>	<u>1.00%</u>	<u>1.00%</u>	<u>1.00%</u>
e) Total	14.00%	14.00%	14.00%	14.00%

*Note: numbers may not add due to rounding.*

<sup>1</sup> 2012 results are based on the valuation performed by PricewaterhouseCoopers LLP.

<sup>2</sup> The 2013 funding period reflects increases in employer and member contribution rates effective in future years.

**SECTION 2: Actuarial Valuation Results as of July 1, 2013, for the State Teachers Retirement System of Ohio**

**A. MEMBER DATA**

The Actuarial Valuation and Review considers the number and demographic characteristics of covered participants, including active members, retirees, and beneficiaries.

This section presents a summary of significant statistical data on these participant groups.

More detailed information for this valuation year and the preceding valuation can be found in Section 3, Exhibits A, B, and C.

*A historical perspective of how the population has changed over past valuations can be seen in this chart.*

**CHART 1**  
**Member Population: 2004 – 2013**

<b>Year Ended June 30</b>	<b>Active Members*</b>	<b>Reemployed Retirees</b>	<b>Inactive Members Eligible for Allowances</b>	<b>Inactive Members Eligible for Refunds Only</b>	<b>Retirees and Beneficiaries</b>	<b>Ratio of Actives to Retirees and Beneficiaries</b>
2004	179,063	17,929	17,763	116,738	111,853	1.60
2005	176,692	19,033	18,148	120,176	115,395	1.53
2006	175,065	19,749	18,333	123,698	119,184	1.47
2007	174,110	20,631	18,346	127,351	122,934	1.42
2008	173,327	21,467	18,300	123,259	126,506	1.37
2009	174,807	22,189	17,980	133,561	129,659	1.35
2010	175,842	23,651	17,377	135,721	133,103	1.32
2011	177,897	23,156	16,990	134,301	138,088	1.29
2012	173,044	23,879	17,325	134,974	143,256	1.21
2013	169,945	24,228	17,081	136,105	149,221	1.14

*\*Excludes defined contribution only members.*

**SECTION 2: Actuarial Valuation Results as of July 1, 2013, for the State Teachers Retirement System of Ohio**

**Active Members**

Plan costs are affected by the age, years of service, and compensation of active members. In this year's valuation, there were 169,945 active members with an average age of 43.5 and 12.0 average years of service. The 173,044 active members in the prior valuation had an average age of 43.8 and 12.3 average years of service.

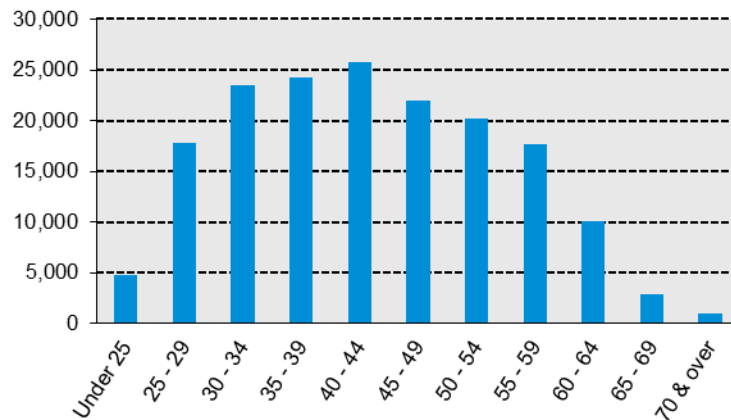
**Inactive Members**

In this year's valuation, there were 17,081 participants with a vested right to a deferred vested benefit.

In addition, there were 136,105 participants entitled to a return of their employee contributions

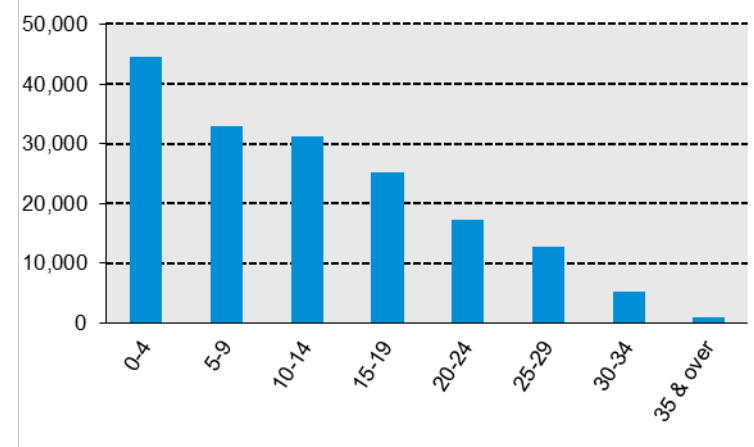
**CHART 2**

**Distribution of Active Participants by Age as of June 30, 2013\***



**CHART 3**

**Distribution of Active Participants by Years of Service as of June 30, 2013\***



\* Excludes defined contribution only members.

**SECTION 2: Actuarial Valuation Results as of July 1, 2013, for the State Teachers Retirement System of Ohio**

---

**Distribution of Active Members by Age and Average Compensation\***

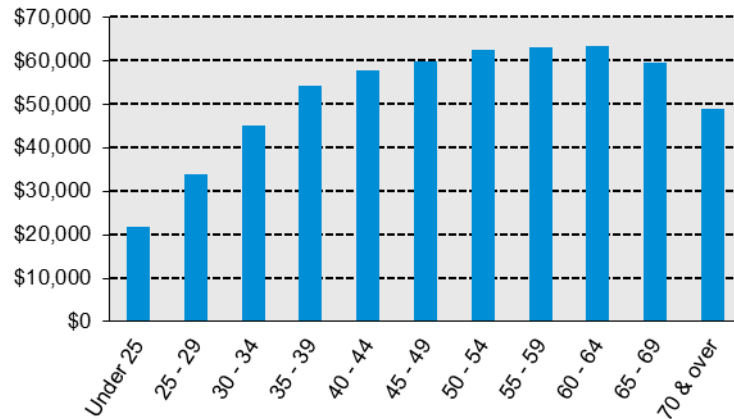
In this year's valuation, there were 169,945 active members with an average compensation of \$53,653. The 173,044 active members in the prior valuation had an average compensation of \$53,992.

*These charts show a distribution of active members by age and by average compensation.*

---

**CHART 4**  
**Distribution of Active Members by Age and Average Compensation as of June 30, 2013**

---



---

\* Excludes defined contribution only members.

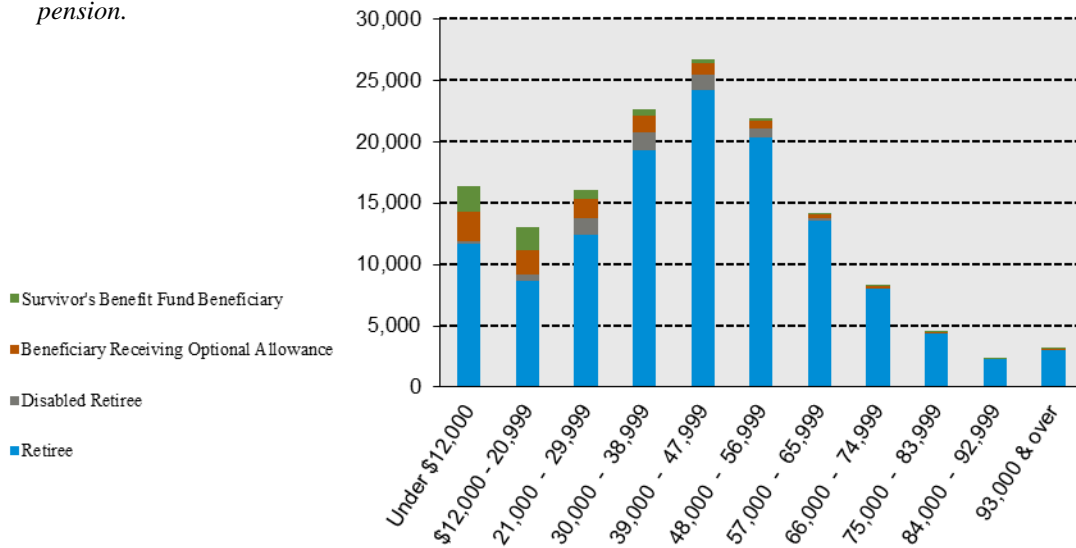
**SECTION 2: Actuarial Valuation Results as of July 1, 2013, for the State Teachers Retirement System of Ohio**

**Retirees and Beneficiaries**

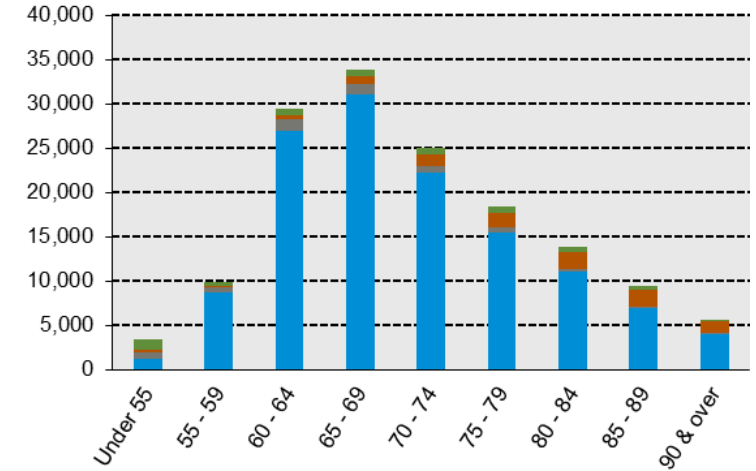
As of June 30, 2013, 133,687 retirees and 15,534 beneficiaries were receiving total annual benefits of \$6,190,182,158. For comparison, in the previous valuation, there were 128,087 retirees and 15,169 beneficiaries receiving annual benefits of \$5,815,407,269.

*These charts show the distribution of the current retirees and beneficiaries based on their age and annual amount, by type of pension.*

**CHART 5**  
**Distribution of Retirees and Beneficiaries by Type and by Annual Amount as of June 30, 2013**



**CHART 6**  
**Distribution of Retirees and Beneficiaries by Type and Age as of June 30, 2013**



**SECTION 2: Actuarial Valuation Results as of July 1, 2013, for the State Teachers Retirement System of Ohio**

---

**Distribution of Retirees and Beneficiaries by Age and Average Monthly Benefit Amount**

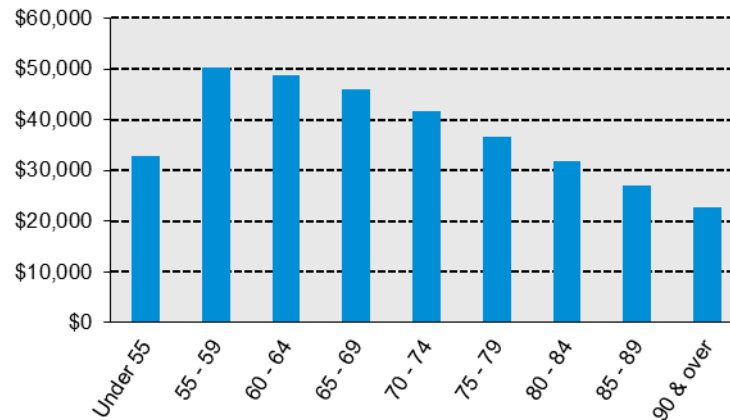
As of June 30, 2013, the average annual benefit amount among 133,687 retirees and 15,534 beneficiaries was \$41,483. In the previous valuation, the average annual benefit amount among 128,087 retirees and 15,169 beneficiaries was \$40,595.

*These charts show a distribution of retirees and beneficiaries by age and by annual amount.*

---

**CHART 7**  
**Distribution of Retirees and Beneficiaries by Age and Average Annual Amount as of June 30, 2013**

---



**SECTION 2: Actuarial Valuation Results as of July 1, 2013, for the State Teachers Retirement System of Ohio**

**B. FINANCIAL INFORMATION**

It is desirable to have level and predictable plan costs from one year to the next. For this reason, STRS Ohio’s Board utilizes an asset valuation method that gradually adjusts to market value. Under this valuation method, the full value of market fluctuations is not recognized in a single year and, as a result, the asset value and the plan costs are more stable. The amount of the adjustment to recognize market value is treated as income, which may be positive or negative.

Realized and unrealized gains and losses are treated equally and, therefore, the sale of assets has no immediate effect on the actuarial value.

*This chart shows the determination of the actuarial value of assets as of the valuation date.*

**CHART 8**  
**Determination of Actuarial Value of Assets for Years Ended June 30, 2013 and June 30, 2012**  
**(\$ in thousands)**

		2013		2012	
		% Not Recognized		% Not Recognized	
1. Market value of Defined Benefit and Combined Plan assets			\$64,705,982		\$60,693,621
2. Calculation of unrecognized return*	<u>Original Amount**</u>				
(a) Year ended June 30, 2013	\$3,511,028	75%	\$2,633,271		
(b) Year ended June 30, 2012	-3,431,549	50%	-1,715,775	75%	-\$2,573,662
(c) Year ended June 30, 2011	7,537,854	25%	1,884,464	50%	3,768,927
(d) Year ended June 30, 2010	2,315,228	0%	<u>0</u>	25%	578,807
(e) Year ended June 30, 2009	-14,430,392			0%	<u>0</u>
(f) Total unrecognized return			\$2,801,960		\$1,774,072
3. Actuarial value of Defined Benefit Plan assets: (1) – (2f)			<u>\$61,904,022</u>		<u>\$58,919,549</u>
4. Adjustment for 91% /109% corridor			0		0
5. Adjusted actuarial value of Defined Benefit Plan assets			61,904,022		58,919,549
6. Defined Contribution Plan assets			686,528		567,702
7. Early Retirement Incentive receivable			<u>236</u>		<u>2,257</u>
8. Total Actuarial Value of Assets: (5) + (6) + (7)			<u>\$62,590,786</u>		<u>\$59,489,508</u>
9. Market Value of Assets – total fund excluding health care assets			\$65,392,510		\$61,261,323
10. Actuarial value as a percent of market value: (8) ÷ (9)			<u>95.7%</u>		<u>97.1%</u>

\* Recognition at 25% per year over 4 years

\*\*Actual market return minus expected return on actuarial value of assets

**SECTION 2: Actuarial Valuation Results as of July 1, 2013, for the State Teachers Retirement System of Ohio**

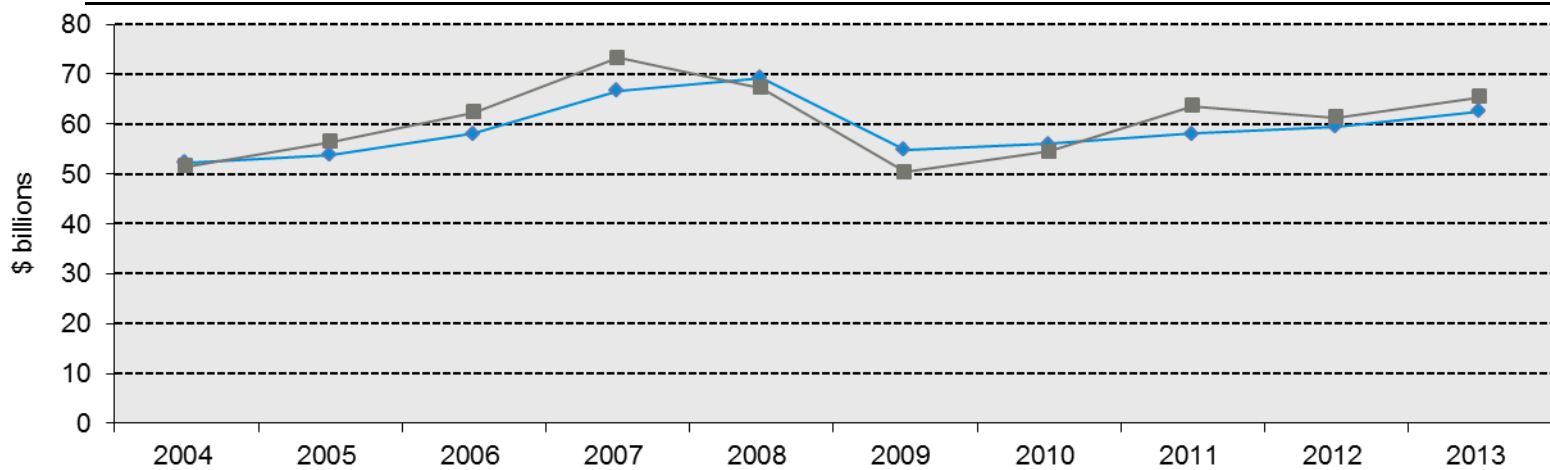
---

Both the actuarial value and market value of assets are a representation of the STRS Ohio's financial status. As investment gains and losses are gradually taken into account, the actuarial value of assets tracks the market value of assets. The actuarial asset value is significant because STRS Ohio's liabilities are compared to these assets to determine what portion, if any, remains unfunded.

---

**CHART 9**

**Actuarial Value of Assets vs. Market Value of Assets as of June 30, 2004 - 2013**





**SECTION 2: Actuarial Valuation Results as of July 1, 2013, for the State Teachers Retirement System of Ohio**

---

**Investment Rate of Return**

A major component of projected asset growth is the assumed rate of return. The assumed return should represent expected long-term rate of return, based on the STRS Ohio's investment policy. For valuation purposes, the assumed rate of return on the actuarial value of assets is 7.75%. The actual rate of return on an actuarial basis for the Plan Year ended June 30, 2013, was 12.11%.

Since the actual return for the year was greater than the assumed return, the STRS Ohio experienced an actuarial gain during the year ended June 30, 2013, with regard to its investments.

*This chart shows the portion of the gain due to investment experience.*

---

**CHART 10**

**Actuarial Value Investment Experience for the Year Ended June 30, 2013  
(\$ in thousands)**

---

1	Net investment income	\$6,897,765
2	Average actuarial value of assets	56,962,903
3	Rate of return: (1) ÷ (2)	12.11%
4	Assumed rate of return	7.75%
5	Expected net investment income: (2) x (4)	\$4,414,625
6	Actuarial gain: (1) – (5)	<u>\$2,483,140</u>

---

**SECTION 2: Actuarial Valuation Results as of July 1, 2013, for the State Teachers Retirement System of Ohio**

---

Because actuarial planning is long term, it is useful to see how the assumed investment rate of return has followed actual experience over time. The chart below shows the rate of return on an actuarial basis compared to the market value investment return for the last twenty years, including five-year, ten-year, fifteen-year and twenty-year averages.

**CHART 11**  
**Investment Return**

<b>Year Ended June 30</b>	<b>Market Value</b>	<b>Actuarial Value</b>
1994	1.3%	8.4%
1995	16.6	9.9
1996	12.3	10.1
1997	16.8	12.7
1998	14.2	14.3
1999	12.5	13.4
2000	10.3	13.1
2001	-6.5	6.7
2002	-8.3	-7.8
2003	1.8	1.6
2004	17.2	9.4
2005	11.9	5.7
2006	13.5	11.0
2007	20.6	18.4
2008	-5.6	7.0
2009	-22.0	-17.7
2010	13.5	6.6
2011	22.5	9.2
2012	1.7	8.5
2013	13.5 *	12.1
Average Returns		
Last 5 years:	4.6%	3.1%
Last 10 years:	7.8%	6.6%
Last 15 years:	5.7%	6.1%
Last 20 years:	7.3%	7.3%

\* As determined by Segal.

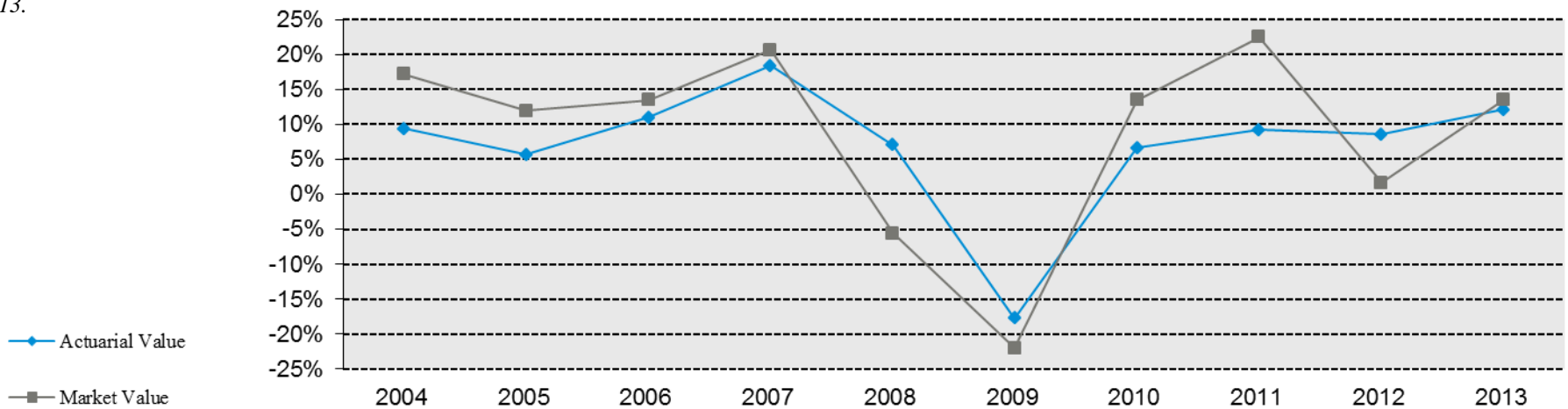
**SECTION 2: Actuarial Valuation Results as of July 1, 2013, for the State Teachers Retirement System of Ohio**

---

The actuarial asset valuation method gradually takes into account fluctuations in the market value rate of return. The effect of this is to stabilize the actuarial rate of return, which contributes to leveling pension plan costs.

*This chart illustrates how this leveling effect has actually worked over the years 2004 – 2013.*

**CHART 12**  
**Market Value and Actuarial Rates of Return for Years Ended June 30, 2004 - 2013**



**SECTION 2: Actuarial Valuation Results as of July 1, 2013, for the State Teachers Retirement System of Ohio**

**Cash Flow**

Cash flow is the difference between contributions and benefit payments, refunds, and expenses. Negative cash flow indicates that the payments made from the System exceed contributions made to the System.

The scheduled increases in the employer and member contribution rates will improve the cash flow percentage, assuming all other experience emerges as expected.

**CHART 13**

**History of Cash Flow (\$ in thousands)**

Year Ending June 30,	Disbursements or Expenditures				Net Cash Flow for the Year <sup>2</sup>	Market Value of Assets	Net Cash Flow as Percent of Market Value	
	Contributions <sup>1</sup>	Benefit Payments	Refunds	Administrative Expenses				Total Disbursement
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2004	\$2,231,209	(\$3,108,753)	(\$102,194)	(\$63,617)	(\$3,274,565)	(\$1,043,356)	\$51,516,530	-2.0%
2005	2,266,942	(3,383,605)	(114,550)	(59,826)	(3,557,982)	(1,291,039)	56,340,712	-2.3%
2006	2,314,277	(3,684,385)	(127,208)	(63,889)	(3,875,482)	(1,561,206)	62,350,079	-2.5%
2007	2,354,257	(4,007,705)	(134,995)	(60,360)	(4,203,059)	(1,848,802)	73,232,205	-2.5%
2008	2,411,593	(4,338,618)	(142,918)	(59,707)	(4,541,242)	(2,129,649)	67,144,639	-3.2%
2009	2,481,032	(4,613,751)	(129,290)	(58,935)	(4,801,976)	(2,320,944)	50,392,731	-4.6%
2010	2,537,505	(4,900,418)	(126,981)	(59,284)	(5,086,684)	(2,549,179)	54,524,225	-4.7%
2011	2,566,848	(5,244,407)	(166,020)	(58,701)	(5,469,128)	(2,902,280)	63,635,912	-4.6%
2012	2,511,482	(5,741,042)	(183,768)	(58,760)	(5,983,569)	(3,472,088)	61,261,323	-5.7%
2013	2,491,122	(6,152,335)	(206,491)	(59,450)	(6,418,277)	(3,927,155)	65,392,510	-6.0%

<sup>1</sup> Column (2) includes employee and employer contributions, as well as any purchased service credits during the year.

<sup>2</sup> Column (7) = Column (2) + Column (6).

**SECTION 2: Actuarial Valuation Results as of July 1, 2013, for the State Teachers Retirement System of Ohio**

---

**Other Experience**

There are other differences between the expected and the actual experience that appear when the new valuation is compared with the projections from the previous valuation. These include, but are not limited to:

- payroll growth different than assumed,
- salary increases different than assumed,
- retirement experience (earlier or later than expected),
- the extent of turnover among the participants,
- mortality (more or fewer deaths than expected), and
- new entrants.

The net loss from this other experience for the year ended June 30, 2013, amounted to \$391 million, which is approximately 0.4% of the actuarial accrued liability.

*This chart shows elements of experience gain/(loss) for the most recent year.*

---

**CHART 14**

**Experience Due to Changes in Demographics for Year Ended June 30, 2013 (\$ in thousands)**

---

1. Payroll growth	-\$36,193
2. Salary increases	816,457
3. Retirement and other separation experience	-1,171,496
4. Plan reselection	-11,124
5. Retirees mortality	39,580
6. New entrants	<u>-27,866</u>
7. Total	-\$390,642

---

**SECTION 2: Actuarial Valuation Results as of July 1, 2013, for the State Teachers Retirement System of Ohio**

---

**C. DEVELOPMENT OF ANNUAL REQUIRED CONTRIBUTION**

The amount of Annual Required Contribution as defined by GASB is comprised of an employer normal cost payment and a payment on the unfunded actuarial accrued liability. This total amount is then divided by the projected payroll for active members to determine the Annual Required Contribution of 14.64% of payroll.

GASB allows the unfunded actuarial accrued liability to be amortized over a period that is no longer than 30 years.

---

**CHART 15**

**Annual Required Contribution (\$ in thousands)**

---

	Year Beginning July 1	
	2013	2012
1. Total normal cost rate	11.79%	15.72%
2. Less: member contribution rate	<u>-10.76</u>	<u>-9.78</u>
3. Employer normal cost rate	1.03%	5.94%
4. 30-year amortization of unfunded actuarial accrued liability	<u>13.61</u>	<u>24.66</u>
5. Annual Required Contribution: (3) + (4)	14.64%	30.60%
6. Employer Contribution	<u>13.00</u>	<u>13.00</u>
7. Contribution Sufficiency/(Deficiency): (6) - (5)	(1.64%)	(17.60%)

---

**SECTION 2: Actuarial Valuation Results as of July 1, 2013, for the State Teachers Retirement System of Ohio**

---

**D. 10 YEAR HISTORY OF PRINCIPAL FINANCIAL RESULTS**

**Net Gain (Loss)**

The results of the valuation as of July 1, 2013, determine the net gain or loss for the year ended June 30, 2013. The net gain due to the plan experience during the prior year is \$2,092 million.

*This chart shows a 10-year history of the net gains or losses.*

---

**Chart 16**

**Ten-Year History of Gains or (Losses) (\$ in millions)**

---

<b>Fiscal Year Ended June 30</b>	<b>Net Gain or (Loss)</b>
2013	\$2,092
2012	(3,982)
2011	181
2010	(279)
2009	(17,801)
2008	(894)
2007	5,234
2006	958
2005	(2,313)
2004	(178)

---

**SECTION 2: Actuarial Valuation Results as of July 1, 2013, for the State Teachers Retirement System of Ohio**

**Funding Period**

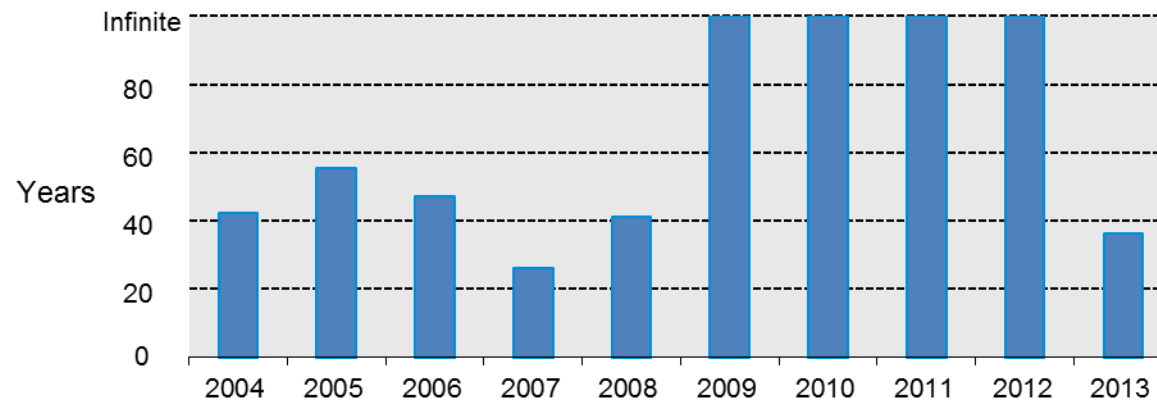
The funding period is the number of years required to liquidate the unfunded actuarial accrued liability.

The following table shows a ten-year history of the funding period along with the member and employer contribution rates:

Valuation as of July 1	Funding Period Years	Contribution Rate	
		Member	Employer
2013	36.1	11.00%	14.00%
2012	Infinite	10.00%	14.00%
2011	Infinite	10.00%	14.00%
2010	Infinite	10.00%	14.00%
2009	Infinite	10.00%	14.00%
2008	41.2	10.00%	14.00%
2007	26.1	10.00%	14.00%
2006	47.2	10.00%	14.00%
2005	55.5	10.00%	14.00%
2004	42.2	10.00%	14.00%

**CHART 17**

**Funding Period, Years Ended June 30**





**SECTION 2: Actuarial Valuation Results as of July 1, 2013, for the State Teachers Retirement System of Ohio**

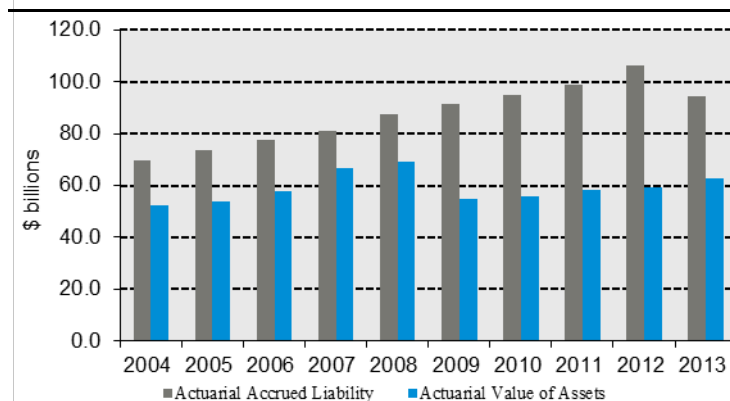
**Funded Ratio**

The System’s funded status is measured by comparing the actuarial value of assets with the actuarial accrued liability. The actuarial accrued liability is the present value of benefits accumulated to date under the System’s funding method and reflects future pay increases for active employees.

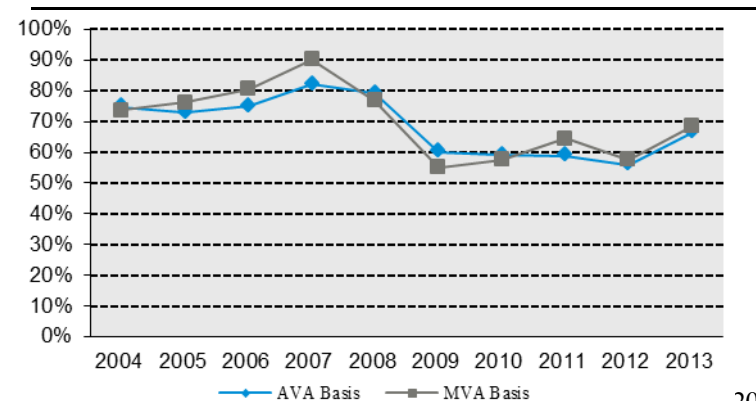
On this basis, the System’s funded ratio is 66.3% as of July 1, 2013. The funded ratio is based on the actuarial value of assets of \$62.6 billion and an actuarial accrued liability of \$94.4 billion.

Valuation as of July 1	Actuarial Accrued Liability (\$ in millions)	Actuarial Value of Assets (\$ in millions)	Unfunded Actuarial Accrued Liability (\$ in millions)	Funded Ratio
2013	\$94,366.7	\$62,590.8	\$31,775.9	66.3%
2012	106,301.8	59,489.5	46,812.3	56.0%
2011	98,766.2	58,110.5	40,655.7	58.8%
2010	94,720.7	55,946.3	38,774.4	59.1%
2009	91,441.0	54,902.9	36,538.1	60.0%
2008	87,432.3	69,198.0	18,234.3	79.1%
2007	81,126.6	66,671.5	14,455.1	82.2%
2006	77,371.0	58,008.0	19,363.0	75.0%
2005	73,817.1	53,765.6	20,051.5	72.8%
2004	69,867.4	52,253.8	17,613.6	74.8%

**CHART 18**  
Actuarial Accrued Liability and Actuarial Value of Assets, Years Ended June 30



**CHART 19**  
Funded Ratio, Years Ended June 30



### SECTION 3: Supplemental Information for the State Teachers Retirement System of Ohio

---

#### MEMBERSHIP DATA\*

Membership data was provided on electronic files sent by the STRS Ohio staff. Data for active members includes gender, birth date, service, salary for the prior fiscal year, and accumulated contributions. Data for inactive members was similar, but also includes account balances. For retired members, data includes status (service retiree, disabled retiree or beneficiary), gender, birth date, pension amount, date of retirement, form of payment, and beneficiary gender and birth date if applicable.

While not verifying the correctness of the data at the source, we performed various tests to ensure the internal consistency of the data and its overall reasonableness.

Membership statistics are summarized in Exhibit A. Exhibits B-1, B-2 and B-3 summarize the age/service distribution of active members of the Defined Benefit and Combined Plans. Exhibits C-1 and C-2 show the distribution of retirees by gender, age and by benefit amount. Exhibit D summarizes 10-year history of membership data. Exhibit E shows 10-year payout projection of benefit payments. Exhibit F shows a reconciliation of the member data from last year's valuation to this year's valuation.

The number of active members decreased by 1.79% since last year, from 173,044 to 169,945. Note that normally the actual number of members employed during the year will be somewhat higher than the valuation count.

Total payroll decreased 1.8% since last year. For all comparative purposes, payroll is the amount supplied by the STRS Ohio staff.

Average salary decreased by 0.6%, from \$53,992 to \$53,653. This includes the impact of replacing more highly paid members who retire with new teachers. The average increase in salary for the 150,792 continuing members (members active in both this valuation and the preceding valuation) was 2.9%.

The average age of active members decreased from 43.8 years to 43.5 years, and their average service decreased from 12.3 years to 12.0 years.

---

\* Excludes defined contribution only members.

**SECTION 3: Supplemental Information for the State Teachers Retirement System of Ohio**

---

The table below shows additional information about the active membership this year and last year. Grandfathered members are those who are eligible to retire as of July 1, 2015.

<b>Active Statistics</b>	
	<b>July 1, 2013</b>
<b>Plan Eligibility*</b>	
a. Grandfathered	28,766
b. Non-grandfathered	141,179
c. Total	169,945
<b>Benefit Eligibility</b>	
a. Non-Vested	46,421
b. Vested, Not Eligible for Retirement	103,757
c. Service Retirement	19,767
d. Total	169,945

*\* Number of Grandfathered and Non-grandfathered members is estimated based on the June 30, 2013 census data and eligibility requirements specified above.*

In addition, this table shows the number of members who are non-vested, those who are vested but not eligible for retirement, and those eligible for a service retirement benefit. As of the valuation date, 19,767 members were eligible for either reduced or unreduced retirement.

**SECTION 3: Supplemental Information for the State Teachers Retirement System of Ohio**

**EXHIBIT A**

**Summary of Membership Data as of July 1, 2013 (\$ in thousands)**

	<b>Male</b>	<b>Female</b>	<b>Total</b>
<b>1. Defined Benefit Plan Active Members</b>			
Number of Members	47,698	117,359	165,057
Annual Salaries (for period ending June 30, 2013)	\$2,765,389	\$6,116,458	\$8,881,847
Average Age	44.24	43.27	43.55
Average Service	11.97	12.17	12.11
<b>2. Combined Plan Active Members</b>			
Number of Members	1,069	3,819	4,888
Annual Salaries (for period ending June 30, 2013)	\$56,086	\$180,102	\$236,188
Average Age	42.72	40.30	40.83
Average Service	6.97	7.51	7.39
<b>3. Total Defined Benefit and Combined Plan Active Members</b>			
Number of Members	48,767	121,178	169,945
Annual Salaries (for period ending June 30, 2013)	\$2,821,475	\$6,296,561	\$9,118,035
Average Age	44.20	43.17	43.47
Average Service	11.86	12.02	11.98
<b>4. Defined Benefit Inactive Members</b>			
Eligible for Allowances	4,134	12,582	16,716
Eligible for Refunds Only	<u>49,287</u>	<u>85,646</u>	<u>134,933</u>
Total	53,421	98,228	151,649
<b>5. Combined Benefit Inactive Members</b>			
Eligible for Allowances	67	298	365
Eligible for Refunds Only	<u>296</u>	<u>876</u>	<u>1,172</u>
Total	363	1,174	1,537
<b>6. Total Inactive Members</b>			
Eligible for Allowances	4,201	12,880	17,081
Eligible for Refunds Only	<u>49,583</u>	<u>86,522</u>	<u>136,105</u>
Total	53,784	99,402	153,186

**SECTION 3: Supplemental Information for the State Teachers Retirement System of Ohio**

**EXHIBIT A**

**Summary of Membership Data as of July 1, 2013 (continued) (\$ in thousands)**

	<b>Male</b>	<b>Female</b>	<b>Total</b>
<b>7. Retirees</b>			
Number of Members	44,964	82,833	127,797
Annual Allowance	\$2,267,609	\$3,330,420	\$5,598,029
Average Allowance (in dollars)	\$50,432	\$40,206	\$43,804
<b>8. Disabled Retirees</b>			
Number of Members	1,899	3,991	5,890
Annual Allowance	\$75,895	\$136,842	\$212,737
Average Allowance (in dollars)	\$39,966	\$34,288	\$36,118
<b>9. Beneficiaries Receiving Optional Allowances</b>			
Number of Members	7,114	2,507	9,621
Annual Allowance	\$213,887	\$46,545	\$260,432
Average Allowance (in dollars)	\$30,066	\$18,566	\$27,069
<b>10. Survivor's Benefit Fund Beneficiaries</b>			
Number of Members	3,218	2,695	5,913
Annual Allowance	\$71,335	\$47,650	\$118,985
Average Allowance (in dollars)	\$22,168	\$17,681	\$20,123
<b>11. Total Retirees and Beneficiaries</b>			
Number of Members	57,195	92,026	149,221
Annual Allowance	\$2,628,725	\$3,561,457	\$6,190,182
Average Allowance (in dollars)	\$45,961	\$38,701	\$41,483

**SECTION 3: Supplemental Information for the State Teachers Retirement System of Ohio**

**EXHIBIT B-1**

**Active Membership Data as of July 1, 2013 – Number and Average Annual Salary**

**Defined Benefit and Combined Plans**

Age	Years of Service									
	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & over
Under 25	4,855	4,853	2	--	--	--	--	--	--	--
	\$21,650	\$21,640	\$45,869	--	--	--	--	--	--	--
25 - 29	17,804	12,647	5,157	--	--	--	--	--	--	--
	\$33,869	\$29,582	\$44,383	--	--	--	--	--	--	--
30 - 34	23,444	6,708	11,149	5,586	1	--	--	--	--	--
	\$45,132	\$29,605	\$48,359	\$57,334	\$56,179	--	--	--	--	--
35 - 39	24,191	4,732	4,412	10,560	4,486	1	--	--	--	--
	\$54,090	\$28,484	\$49,670	\$61,423	\$68,179	\$68,594	--	--	--	--
40 - 44	25,801	4,630	3,561	4,841	9,372	3,396	1	--	--	--
	\$57,761	\$25,435	\$48,005	\$61,084	\$70,054	\$73,397	\$86,111	--	--	--
45 - 49	21,995	3,644	2,812	3,186	3,698	5,922	2,729	4	--	--
	\$59,844	\$23,330	\$46,818	\$60,302	\$70,255	\$74,447	\$75,658	\$85,020	--	--
50 - 54	20,205	2,721	2,354	2,925	2,884	2,890	5,151	1,280	--	--
	\$62,335	\$22,632	\$44,171	\$60,966	\$68,935	\$77,282	\$76,912	\$75,989	--	--
55 - 59	17,667	2,162	1,774	2,359	2,811	2,898	2,610	2,661	392	--
	\$63,191	\$22,192	\$40,652	\$57,813	\$66,691	\$76,027	\$81,042	\$79,162	\$76,417	--
60 - 64	10,069	1,401	1,080	1,297	1,455	1,788	1,715	988	327	18
	\$63,395	\$19,335	\$34,413	\$55,392	\$67,611	\$77,153	\$84,636	\$90,798	\$90,659	\$77,451
65 & over	3,914	1,017	564	423	394	442	452	356	165	101
	\$56,870	\$13,499	\$27,476	\$53,338	\$69,706	\$84,170	\$93,670	\$98,852	\$108,010	\$106,761
Total	169,945	44,515	32,865	31,177	25,101	17,337	12,658	5,289	884	119
	\$53,653	\$26,186	\$46,208	\$59,847	\$69,096	\$75,504	\$79,139	\$81,898	\$87,582	\$102,327

**SECTION 3: Supplemental Information for the State Teachers Retirement System of Ohio**

**EXHIBIT B-2**

**Active Membership Data as of July 1, 2013 – Number and Average Annual Salary**

Age	Defined Benefit Plan									
	Years of Service									
	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & over
Under 25	4,624	4,622	2	--	--	--	--	--	--	--
	\$21,551	\$21,540	\$45,869	--	--	--	--	--	--	--
25 - 29	17,138	12,208	4,930	--	--	--	--	--	--	--
	\$33,784	\$29,506	\$44,379	--	--	--	--	--	--	--
30 - 34	22,562	6,491	10,732	5,338	1	--	--	--	--	--
	\$45,034	\$29,376	\$48,359	\$57,387	\$56,179	--	--	--	--	--
35 - 39	23,420	4,563	4,237	10,230	4,389	1	--	--	--	--
	\$54,033	\$28,075	\$49,525	\$61,372	\$68,260	\$68,594	--	--	--	--
40 - 44	25,162	4,431	3,393	4,653	9,288	3,396	1	--	--	--
	\$57,916	\$25,118	\$47,888	\$60,921	\$70,057	\$73,397	\$86,111	--	--	--
45 - 49	21,431	3,497	2,636	3,000	3,643	5,922	2,729	4	--	--
	\$59,988	\$22,956	\$46,233	\$59,906	\$70,285	\$74,447	\$75,658	\$85,020	--	--
50 - 54	19,699	2,606	2,225	2,735	2,812	2,890	5,151	1,280	--	--
	\$62,583	\$22,457	\$43,806	\$60,798	\$68,905	\$77,282	\$76,912	\$75,989	--	--
55 - 59	17,262	2,086	1,662	2,211	2,742	2,898	2,610	2,661	392	--
	\$63,425	\$21,910	\$39,879	\$57,730	\$66,653	\$76,027	\$81,042	\$79,162	\$76,417	--
60 - 64	9,898	1,362	1,037	1,233	1,430	1,788	1,715	988	327	18
	\$63,670	\$19,367	\$33,983	\$55,325	\$67,499	\$77,153	\$84,636	\$90,798	\$90,659	\$77,451
65 & over	3,861	1,000	547	409	389	442	452	356	165	101
	\$57,231	\$13,445	\$27,736	\$53,435	\$69,816	\$84,170	\$93,670	\$98,852	\$108,010	\$106,761
Total	165,057	42,866	31,401	29,809	24,694	17,337	12,658	5,289	884	119
	\$53,811	\$25,992	\$46,056	\$59,759	\$69,109	\$75,504	\$79,139	\$81,898	\$87,582	\$102,327

**SECTION 3: Supplemental Information for the State Teachers Retirement System of Ohio**

**EXHIBIT B-3**

**Active Membership Data as of July 1, 2013 – Number and Average Annual Salary**

		Combined Plan								
		Years of Service								
Age	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & over
Under 25	231	231	--	--	--	--	--	--	--	--
	\$23,636	\$23,636	--	--	--	--	--	--	--	--
25 - 29	666	439	227	--	--	--	--	--	--	--
	\$36,059	\$31,709	\$44,473	--	--	--	--	--	--	--
30 - 34	882	217	417	248	--	--	--	--	--	--
	\$47,641	\$36,454	\$48,368	\$56,206	--	--	--	--	--	--
35 - 39	771	169	175	330	97	--	--	--	--	--
	\$55,820	\$39,527	\$53,187	\$62,997	\$64,536	--	--	--	--	--
40 - 44	639	199	168	188	84	--	--	--	--	--
	\$51,684	\$32,486	\$50,361	\$65,133	\$69,713	--	--	--	--	--
45 - 49	564	147	176	186	55	--	--	--	--	--
	\$54,396	\$32,226	\$55,586	\$66,690	\$68,266	--	--	--	--	--
50 - 54	506	115	129	190	72	--	--	--	--	--
	\$52,683	\$26,598	\$50,476	\$63,375	\$70,089	--	--	--	--	--
55 - 59	405	76	112	148	69	--	--	--	--	--
	\$53,226	\$29,927	\$52,119	\$59,053	\$68,186	--	--	--	--	--
60 - 64	171	39	43	64	25	--	--	--	--	--
	\$47,461	\$18,207	\$44,800	\$56,687	\$74,058	--	--	--	--	--
65 & over	53	17	17	14	5	--	--	--	--	--
	\$30,581	\$16,673	\$19,106	\$50,487	\$61,151	--	--	--	--	--
Total	4,888	1,649	1,464	1,368	407	--	--	--	--	--
	\$48,320	\$31,231	\$49,465	\$61,764	\$68,253	--	--	--	--	--



**SECTION 3: Supplemental Information for the State Teachers Retirement System of Ohio**

**EXHIBIT C-1**

**Retiree and Beneficiary Membership Data as of July 1, 2013 -  
Number and Annual Retirement Allowance**

Group	Number	Annual Allowances as of July 1, 2013		
		Basic	Cost-of-Living Increases	Total
<b>Superannuation Retirees</b>				
Males	44,964	\$ 1,765,346,811	\$ 502,262,001	\$ 2,267,608,812
Females	<u>82,833</u>	<u>2,718,747,631</u>	<u>611,672,266</u>	<u>3,330,419,898</u>
Subtotal	127,797	4,484,094,442	1,113,934,268	5,598,028,710
<b>Beneficiaries Receiving Optional Allowances</b>				
Males	7,114	138,761,204	75,125,487	213,886,691
Females	<u>2,507</u>	<u>34,678,523</u>	<u>11,866,462</u>	<u>46,544,985</u>
Subtotal	9,621	173,439,727	86,991,949	260,431,676
<b>Survivors' Benefit Fund Beneficiaries</b>				
Males	3,218	49,415,486	21,919,720	71,335,206
Females	<u>2,695</u>	<u>35,153,259</u>	<u>12,496,672</u>	<u>47,649,931</u>
Subtotal	5,913	84,568,746	34,416,392	118,985,137
<b>Disability Retirees</b>				
Males	1,899	52,751,145	23,143,428	75,894,573
Females	<u>3,991</u>	<u>100,045,631</u>	<u>36,796,431</u>	<u>136,842,062</u>
Subtotal	5,890	152,796,776	59,939,859	212,736,635
<b>Grand Total</b>	<u>149,221</u>	<u>\$ 4,894,899,691</u>	<u>\$ 1,295,282,467</u>	<u>\$ 6,190,182,158</u>

**SECTION 3: Supplemental Information for the State Teachers Retirement System of Ohio**

**EXHIBIT C-2**

**Retiree And Beneficiary Membership Data as of July 1, 2013 -  
Number And Annual Retirement Allowance**

<b>Age Last Birthday</b>	<b>Number</b>	<b>Annual Allowance</b>	<b>Average Annual Allowance</b>
<b>Retired Annuitants</b>			
Under 60	11,592	\$ 602,072,274	\$ 51,939
60 - 64	28,745	1,437,850,671	50,021
65 - 69	30,183	1,424,522,537	47,196
70 - 74	21,534	925,689,051	42,987
75 - 79	14,806	567,419,690	38,324
Over 79	<u>20,937</u>	<u>640,474,486</u>	<u>30,591</u>
Total	127,797	\$ 5,598,028,710	\$ 43,804
<b>Beneficiaries Receiving Optional Allowances</b>			
Under 60	465	\$ 11,563,158	\$ 24,867
60 - 64	486	17,407,740	35,818
65 - 69	867	30,333,641	34,987
70 - 74	1,254	41,925,285	33,433
75 - 79	1,626	46,405,253	28,540
Over 79	<u>4,923</u>	<u>112,796,599</u>	<u>22,912</u>
Total	9,621	\$ 260,431,676	\$ 27,069
<b>Survivors' Benefit Fund Beneficiaries</b>			
Under 60	1,636	\$ 25,280,851	\$ 15,453
60 - 64	767	19,475,841	25,392
65 - 69	877	21,001,118	23,947
70 - 74	734	16,911,338	23,040
75 - 79	705	14,706,581	20,860
Over 79	<u>1,194</u>	<u>21,609,408</u>	<u>18,098</u>
Total	5,913	\$ 118,985,137	\$ 20,123
<b>Disability Retirees</b>			
Under 60	1,509	\$ 56,340,832	\$ 37,337
60 - 64	1,346	51,631,291	38,359
65 - 69	1,159	45,308,714	39,093
70 - 74	762	27,553,990	36,160
75 - 79	523	16,334,263	31,232
Over 79	<u>591</u>	<u>15,567,544</u>	<u>26,341</u>
Total	5,890	\$ 212,736,635	\$ 36,118
<b>Grand Total</b>	<b>149,221</b>	<b>\$ 6,190,182,158</b>	<b>\$ 41,483</b>

**SECTION 3: Supplementary Information for the State Teachers Retirement System of Ohio**

**EXHIBIT D**

**10-Year History of Membership Data**

<b>Active Members</b>					
<b>Valuation as of July 1</b>	<b>Number of Active Members</b>	<b>Percentage Change in Membership</b>	<b>Total Annual Payroll (for Period Ending June 30<sup>th</sup>)</b>	<b>Average Annual Pay</b>	<b>Percentage Increase in Average Pay</b>
2013	169,945	(1.8)%	\$ 9,118,035,483	\$ 53,653	(0.5)%
2012	173,044	(2.7)%	9,330,845,312	53,922	(0.2)%
2011	177,897	1.2%	9,609,723,360	54,018	(1.4)%
2010	175,842	0.6%	9,633,354,504	54,784	0.8%
2009	174,807	0.9%	9,502,701,044	54,361	2.6%
2008	173,327	(0.4)%	9,187,562,138	53,007	2.0%
2007	174,110	(0.5)%	9,051,842,381	51,989	2.3%
2006	175,065	(1.0)%	8,894,400,155	50,806	2.5%
2005	176,692	(1.0)%	8,757,199,911	49,562	2.6%
2004	179,063	(0.5)%	8,646,404,055	48,287	3.1%
<b>Retirees and Beneficiaries</b>					
<b>Valuation as of July 1</b>	<b>Number</b>	<b>Percentage Change in Number of Recipients</b>	<b>Annual Allowances</b>	<b>Percentage Change in Allowances</b>	<b>Average Annual Annuity</b>
2013	149,221	4.2%	\$ 6,190,182,158	6.4%	\$ 41,483
2012	143,256	3.7%	5,815,407,270	7.8%	40,594
2011	138,088	3.7%	5,393,372,046	8.8%	39,057
2010	133,103	2.7%	4,957,960,446	5.3%	37,249
2009	129,659	2.5%	4,706,964,923	6.5%	36,303
2008	126,506	2.9%	4,418,799,899	7.1%	34,930
2007	122,934	3.1%	4,124,657,496	7.7%	33,552
2006	119,184	3.3%	3,828,395,485	8.1%	32,121
2005	115,395	3.2%	3,540,240,508	8.2%	30,679
2004	111,853	3.3%	3,272,078,267	8.3%	29,253

**SECTION 3: Supplementary Information for the State Teachers Retirement System of Ohio**

---

---

**EXHIBIT E**  
**10-Year Payout Projection of Benefit Payments (\$ in thousands)**

---

<b>Fiscal Year</b>	<b>Projected Annual Benefits During the Year</b>
2014	\$6,347,613
2015	6,470,893
2016	6,673,238
2017	6,835,037
2018	6,970,872
2019	7,110,591
2020	7,250,485
2021	7,391,557
2022	7,516,529
2023	7,642,134

**SECTION 3: Supplementary Information for the State Teachers Retirement System of Ohio**

**EXHIBIT F**

**Reconciliation of Member Data by Status for the Year Ending June 30, 2013\***

	<b>Active Members</b>	<b>Reemployed Retirees</b>	<b>Inactive Members Eligible for Allowances</b>	<b>Inactive Members Eligible for Refunds Only</b>	<b>Retirees</b>	<b>Beneficiaries</b>	<b>Total</b>
A. Number as of June 30, 2012	173,044	23,879	17,325	134,974	128,087	15,169	492,478
B. Additions and new hires	12,358	3,584	0	0	12	0	15,954
C. Participant movement							
1. Retirement	-7,726	0	-736	-31	8,493	0	0
2. Died with beneficiary	-62	0	-7	-1	-851	1,215	294
3. Died without beneficiary	0	0	0	0	-2,067	-831	-2,898
4. Inactive member eligible for allowance	-2,564	0	2,584	0	-20	0	0
5. Inactive member eligible for refunds only	-9,968	0	0	9,970	-2	0	0
6. Refunds	-1,751	-3,235	-799	-6,203	0	0	-11,988
7. Rehired as active	6,601	0	-1,304	-5,288	-9	0	0
8. Plan reselection	32	0	0	0	0	0	32
9. Expired benefits	0	0	0	0	0	0	0
D. Data adjustments	<u>-19</u>	<u>0</u>	<u>18</u>	<u>2,684</u>	<u>44</u>	<u>-19</u>	<u>2,708</u>
E. Number as of June 30, 2013	169,945	24,228	17,081	136,105	133,687	15,534	496,580

\* Excludes defined contribution members only

**SECTION 3: Supplementary Information for the State Teachers Retirement System of Ohio**

**EXHIBIT G**

**Statement of Change in Plan Net Assets for Year Ended June 30, 2013 (\$ in thousands)**

	As of June 30		
	Defined Benefit and Combined Plans	Defined Contribution Plan	Total
A. Assets available at June 30, 2012	\$60,693,621	\$567,702	\$61,261,323
B. Revenue for the year			
1. Contributions			
Member	\$1,042,959	\$52,331	\$1,095,290
Employer	1,327,863	30,027	1,357,889
Transfers from Defined Contribution Plan	16,738	(16,738)	-
Retirement Incentive	4,638	-	4,638
Other Retirement systems	<u>33,305</u>	<u>-</u>	<u>33,305</u>
Total	\$2,425,502	\$65,620	\$2,491,122
2. Investment Income			
Net appreciation (depreciation) in fair value of investments	\$6,732,100	\$74,266	\$6,806,366
Interest, dividends, and other income	1,435,030	110	1,435,140
Investment expenses	<u>(182,864)</u>	<u>(299)</u>	<u>(183,163)</u>
Total	\$7,984,266	\$74,077	\$8,058,343
C. Expenditures for the year			
Benefits	\$6,152,335	\$ -	\$6,152,335
Refunds to members who have withdrawn	186,458	20,033	206,491
Administrative expenses	58,613	837	59,450
Total deductions	<u>\$6,397,406</u>	<u>\$20,870</u>	<u>\$6,418,277</u>
Net increase (decrease)	\$4,012,361	\$118,826	\$4,131,187
D. Market value of assets as of June 30, 2013	\$64,705,982	\$686,528	\$65,392,510

**SECTION 3: Supplementary Information for the State Teachers Retirement System of Ohio**

**EXHIBIT H**

**Development of Unfunded Actuarial Accrued Liability (\$ in thousands)**

	Year Ending June 30	
	2013	2012
1. Unfunded actuarial accrued liability at beginning of year	\$46,812,333	\$40,655,709
2. Normal cost at beginning of year	1,494,081	1,420,481
3. Total contributions	2,425,502*	2,511,482
4. Interest on:		
(a) Unfunded actuarial accrued liability and normal cost	\$3,743,747	\$3,366,095
(b) Total contributions	<u>93,988</u>	<u>100,459</u>
(c) Total interest: (4a) – (4b)	<u>3,649,759</u>	<u>3,265,636</u>
5. Expected unfunded actuarial accrued liability: (1) + (2) – (3) + (4c)	\$49,530,671	\$42,830,344
6. Changes due to (gain)/loss from:		
(a) Investments	-\$2,483,140	-\$324,840
(b) Demographics	<u>390,642</u>	<u>128,088</u>
(c) Total changes due to (gain)/loss: (6a) + (6b)	-2,092,498	-196,752
7. Change due to plan amendments	-15,662,266	0
8. Change in actuarial assumptions	<u>0</u>	<u>4,178,741</u>
9. Unfunded actuarial accrued liability at end of year: (5) + (6c) + (7) + (8)	<u>\$31,775,907</u>	<u>\$46,812,333</u>

\* Excluding contribution to the Defined Contribution Plan.

### SECTION 3: Supplementary Information for the State Teachers Retirement System of Ohio

---

#### EXHIBIT I

#### Definitions of Pension Terms

---

The following list defines certain technical terms for the convenience of the reader:

**Actuarial Accrued Liability**

**For Actives:**

The equivalent of the accumulated normal costs allocated to the years before the valuation date.

**Actuarial Accrued Liability**

**For Pensioners:**

The single-sum value of lifetime benefits to existing pensioners. This sum takes account of life expectancies appropriate to the ages of the pensioners and the interest that the sum is expected to earn before it is entirely paid out in benefits.

**Actuarial Cost Method:**

A procedure allocating the Actuarial Present Value of Future Benefits to various time periods; a method used to determine the Normal Cost and the Actuarial Accrued Liability that are used to determine the Annual Required Contribution.

**Actuarial Gain or Actuarial Loss:**

A measure of the difference between actual experience and that expected based upon a set of Actuarial Assumptions, during the period between two Actuarial Valuation dates. Through the actuarial assumptions, rates of decrements, rates of salary increases, and rates of fund earnings have been forecasted. To the extent that actual experience differs from that assumed, Actuarial Accrued Liabilities emerge which may be the same as forecasted, or may be larger or smaller than projected. Actuarial gains are due to favorable experience, e.g., STRS Ohio's assets earn more than projected, salary increases are less than assumed, members retire later than assumed, etc. Favorable experience means actual results produce actuarial liabilities not as large as projected by the actuarial assumptions. On the other hand, actuarial losses are the result of unfavorable experience, i.e., actual results yield in actuarial liabilities that are larger than projected. Actuarial gains will shorten the time required for funding of the actuarial balance sheet deficiency while actuarial losses will lengthen the funding period



### SECTION 3: Supplementary Information for the State Teachers Retirement System of Ohio

---

**Actuarially Equivalent:** Of equal actuarial present value, determined as of a given date and based on a given set of Actuarial Assumptions.

**Actuarial Present Value (APV):** The value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of Actuarial Assumptions. Each such amount or series of amounts is:

- a. Adjusted for the probable financial effect of certain intervening events (such as changes in compensation levels, marital status, etc.)
- b. Multiplied by the probability of the occurrence of an event (such as survival, death, disability, termination of employment, etc.) on which the payment is conditioned, and
- c. Discounted according to an assumed rate (or rates) of return to reflect the time value of money.

**Actuarial Present Value of Future Plan Benefits:** The Actuarial Present Value of benefit amounts expected to be paid at various future times under a particular set of Actuarial Assumptions, taking into account such items as the effect of advancement in age, anticipated future compensation, and future service credits. The Actuarial Present Value of Future Plan Benefits includes the liabilities for active members, retired members, beneficiaries receiving benefits, and inactive members entitled to either a refund or a future retirement benefit. Expressed another way, it is the value that would have to be invested on the valuation date so that the amount invested plus investment earnings would be provide sufficient assets to pay all projected benefits and expenses when due.

**Actuarial Valuation:** The determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related Actuarial Present Values for a plan. An Actuarial Valuation for a governmental retirement system typically also includes calculations of items needed for compliance with GASB Statement No. 25, such as the funded ratio and the ARC.

**Actuarial Value of Assets:** The value of the System's assets as of a given date, used by the actuary for valuation purposes. This may be the market or fair value of plan assets, but commonly plans use a smoothed value in order to reduce the year-to-year volatility of calculated results, such as the funded ratio and the ARC

### SECTION 3: Supplementary Information for the State Teachers Retirement System of Ohio

---

<b>Actuarially Determined:</b>	Values that have been determined utilizing the principles of actuarial science. An actuarially determined value is derived by application of the appropriate actuarial assumptions to specified values determined by provisions of the law.
<b>Amortization Method:</b>	A method for determining the Amortization Payment. The most common methods used are level dollar and level percentage of payroll. Under the Level Dollar method, the Amortization Payment is one of a stream of payments, all equal, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the Amortization Payment is one of a stream of increasing payments, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the stream of payments increases at the assumed rate at which total covered payroll of all active members will increase.
<b>Amortization Payment:</b>	The portion of the pension plan contribution, or ARC, that is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability.
<b>Annual Required Contribution (ARC):</b>	The employer's periodic required contributions, expressed as a dollar amount or a percentage of covered plan compensation, determined under GASB Statement No. 25. The ARC consists of the Employer Normal Cost and the Amortization Payment.
<b>Assumptions or Actuarial Assumptions:</b>	<p>The estimates on which the cost of the System is calculated including:</p> <ul style="list-style-type: none"><li>(a) <u>Investment return</u> - the rate of investment yield that the System will earn over the long-term future;</li><li>(b) <u>Mortality rates</u> - the death rates of employees and pensioners; life expectancy is based on these rates;</li><li>(c) <u>Retirement rates</u> - the rate or probability of retirement at a given age;</li><li>(d) <u>Turnover rates</u> - the rates at which employees of various ages are expected to leave employment for reasons other than death, disability, or retirement;</li><li>(e) <u>Salary increase rates</u> - the rates of salary increase due to inflation and productivity growth</li></ul>

### SECTION 3: Supplementary Information for the State Teachers Retirement System of Ohio

---

<b>Closed Amortization Period:</b>	A specific number of years that is counted down by one each year, and therefore declines to zero with the passage of time. For example, if the amortization period is initially set at 30 years, it is 29 years at the end of one year, 28 years at the end of two years, etc. See Funding Period and Open Amortization Period.
<b>Decrements:</b>	Those causes/events due to which a member's status (active-inactive-retiree-beneficiary) changes, that is: death, retirement, disability, or termination.
<b>Defined Benefit Plan:</b>	A retirement plan in which benefits are defined by a formula applied to the member's compensation and/or years of service.
<b>Defined Contribution Plan:</b>	A retirement plan, such as a 401(k) plan, a 403(b) plan, or a 457 plan, in which the contributions to the plan are assigned to an account for each member, the plan's earnings are allocated to each account, and each member's benefits are a direct function of the account balance.
<b>Employer Normal Cost:</b>	The portion of the Normal Cost to be paid by the employers. This is equal to the Normal Cost less expected member contributions.
<b>Experience Study:</b>	A periodic review and analysis of the actual experience of the Fund that may lead to a revision of one or more actuarial assumptions. Actual rates of decrement and salary increases are compared to the actuarially assumed values and modified as deemed appropriate by the Actuary.
<b>Funded Ratio:</b>	The ratio of the actuarial value of assets (AVA) to the actuarial accrued liability (AAL). Plans sometimes calculate a market funded ratio, using the market value of assets (MVA), rather than the AVA, although GASB 25 reporting requires the use of the AVA.
<b>Funding Period or Amortization Period:</b>	The term "Funding Period" is used in two ways. First, it is the period used in calculating the Amortization Payment as a component of the ARC. Second, it is a calculated item: the number of years in the future that will theoretically be required to amortize (i.e., pay off or eliminate) the Unfunded Actuarial Accrued Liability, based on the statutory employer contribution rate, and assuming no future actuarial gains or losses.

### SECTION 3: Supplementary Information for the State Teachers Retirement System of Ohio

---

<b>GASB:</b>	Governmental Accounting Standards Board.
<b>GASB 25 and GASB 27:</b>	Governmental Accounting Standards Board Statements No. 25 and No. 27. These are the governmental accounting standards that set the accounting rules for public retirement systems and the employers that sponsor or contribute to them. Statement No. 27 sets the accounting rules for the employers that sponsor or contribute to public retirement systems, while Statement No. 25 sets the rules for the systems themselves.
<b>GASB 67 and GASB 68:</b>	Governmental Accounting Standards Board Statements No. 67 and No. 68 are the successor statements to GASB Statements No. 25 and No. 27.
<b>Investment Return:</b>	The rate of earnings of the System from its investments, including interest, dividends and capital gain and loss adjustments, computed as a percentage of the average value of the System. For actuarial purposes, the investment return often reflects a smoothing of the capital gains and losses to avoid significant swings in the value of assets from one year to the next.
<b>Margin:</b>	The difference, whether positive or negative, between the statutory employer contribution rate and the Annual Required Contribution (ARC) as defined by GASB 25.
<b>Normal Cost:</b>	That portion of the Actuarial Present Value of pension plan benefits and expenses allocated to a valuation year by the Actuarial Cost Method. Any payment in respect of an Unfunded Actuarial Accrued Liability is not part of Normal Cost (see Amortization Payment). For pension plan benefits that are provided in part by employee contributions, Normal Cost refers to the total of employee contributions and employer Normal Cost unless otherwise specifically stated. Under the entry age normal cost method, the Normal Cost is intended to be the level cost (when expressed as a percentage of pay) needed to fund the benefits of a member from hire until ultimate termination, death, disability, or retirement.

**SECTION 3: Supplementary Information for the State Teachers Retirement System of Ohio**

---

**Unfunded Actuarial Accrued Liability:**

The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. This value may be negative in which case it may be expressed as a negative Unfunded Actuarial Accrued Liability, also called the Funding Surplus.

**Valuation Date or Actuarial Valuation Date:**

The date as of which the value of assets is determined and as of which the Actuarial Present Value of Future Plan Benefits is determined. The expected benefits to be paid in the future are discounted to this date.

**SECTION 4: Reporting Information for the State Teachers Retirement System of Ohio**

---

**EXHIBIT I**

**Schedule of Employer Contribution (GASB) (\$ in thousands)**

---

<b>Fiscal Year ended June 30</b>	<b>Annual Required Contribution</b>	<b>Percentage Contributed</b>
2013	\$ 2,910,537	46%
2012	\$ 3,248,651	41%
2011	\$ 2,715,523	51%
2010	\$ 2,623,624	52%
2009	\$ 1,502,240	89%
2008	\$ 1,329,498	100%

The information presented above was determined as part of the actuarial valuation as of one year prior to the dates indicated (e.g., the contribution determined by the valuation completed as of July 1, 2012, was contributed in the fiscal year ending June 30, 2013).

**SECTION 4: Reporting Information for the State Teachers Retirement System of Ohio**

**EXHIBIT II**

**Schedule of Funding Progress (GASB) (\$ in thousands)**

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Valuation Date	Actuarial Value of Assets (AVA)	Actuarial Accrued Liability (AAL)	Unfunded Actuarial Accrued Liability (UAAL) (3) – (2)	Funded Ratio (2) / (3)	Covered Payroll	UAAL as a % of Payroll (4) / (6)
07/01/2013	\$62,590,786	\$94,366,694	\$31,775,907	66.3%	\$10,765,635	295%
07/01/2012	59,489,508	106,301,841	46,812,333	56.0%	10,879,075	430%
07/01/2011	58,110,495	98,766,204	40,655,709	58.8%	11,097,598	366%
07/01/2010	55,946,259	94,720,669	38,774,410	59.1%	11,057,260	351%
07/01/2009	54,902,859	91,440,955	36,538,096	60.0%	10,800,817	338%
07/01/2008	69,198,008	87,432,348	18,234,340	79.1%	10,460,473	174%

*Note: numbers may not add due to rounding.*

**SECTION 4: Reporting Information for the State Teachers Retirement System of Ohio**

**EXHIBIT III  
Solvency Test**

Valuation as of July 1	Actuarial Accrued Liability for:			Valuation Assets	Portion of Actuarial Accrued Liability Covered by Valuation Assets		
	(1) Active Member Contributions	(2) Retirees and Beneficiaries	(3) Active Member (Employer Financed Portion)		(1)	(2)	(3)
2013	\$ 10,962,886,085	\$ 68,075,440,331	\$ 15,328,367,303	\$ 62,590,786,268	100%	76%	0%
2012	10,985,246,152	68,111,174,550	27,205,420,328	59,489,507,736	100%	71%	0%
2011	10,907,610,852	62,441,600,645	25,416,992,764	58,110,495,261	100%	76%	0%
2010	10,641,166,707	57,754,654,376	26,324,848,105	55,946,259,276	100%	78%	0%
2009	10,295,816,001	54,909,045,630	26,236,093,324	54,902,858,958	100%	81%	0%
2008	9,737,925,927	51,874,103,109	25,820,318,938	69,198,008,279	100%	100%	29%
2007	9,563,124,339	47,526,142,413	24,037,374,773	66,671,511,174	100%	100%	40%
2006	9,284,075,626	44,219,489,046	23,867,458,920	58,008,049,908	100%	100%	19%
2005	8,940,970,871	40,937,540,065	23,938,603,024	53,765,569,817	100%	100%	16%
2004	8,600,068,081	37,870,699,746	23,396,657,610	52,253,798,568	100%	100%	25%

\* Excludes health care assets. Years prior to 2008 included the health care assets in prior disclosure, but have been restated to exclude these assets.



## SECTION 4: Reporting Information for the State Teachers Retirement System of Ohio

---

---

### EXHIBIT IV

#### Supplementary Information Required by the GASB

---

<b>Valuation date</b>	July 1, 2013
<b>Actuarial cost method</b>	Entry Age Normal cost method
<b>Amortization method</b>	Level percent of payroll
<b>Amortization period</b>	30-year open period
<b>Asset valuation method</b>	Market value of assets less unrecognized returns in each of the last four years. Unrecognized return is equal to the difference between the actual market return and the expected return on the actuarial value of assets, and is recognized over a four-year period. There is a 91%/109% corridor.
<b>Actuarial assumptions:</b>	
Investment rate of return	7.75% per annum
Projected salary increases	12.25% at age 20 to 2.75% at age 70
Payroll increase	3.5% for next five years, 4% thereafter
Inflation	2.75%
Cost of living adjustments	2% simple applied as follows: <ul style="list-style-type: none"><li>- members who retired before July 1, 2013, will not receive a COLA during the 2014 fiscal year. Members who retired effective July 1, 2013, will not receive a COLA on July 1, 2014. After missing one COLA, retirees will resume COLA at 2% per year.</li><li>- for members retiring August 1, 2013, or later, the 2% COLA is paid on the fifth anniversary of the retirement date.</li></ul>

---

**SECTION 4: Reporting Information for the State Teachers Retirement System of Ohio**

---

**EXHIBIT V**

**Summary of Assumptions and Methods**

---

**Investment Return Rate:** 7.75% per annum, compounded annually and net of all expenses.

**Mortality Rates:**

**Post-Retirement:**

RP-2000 Combined Mortality Table (Projection 2022 – Scale AA). Males are set back two years through age 89 and no set back for age 90 and above. Females are set back four years through age 79, one year set back from age 80 through 89, and no set back from age 90 and above. (Adopted effective July 1, 2012.)

**Pre-Retirement:**

Mortality rates for males are the same as the male post-retirement mortality rates with the exception that pre-retirement mortality rates for male age 45 and older are 25% less than the male post-retirement mortality rates. Mortality rates for females are the same as the female post-retirement rates with the exception that the pre-retirement mortality rates for females between age 50 and 57 are 25% less than the female post-retirement mortality rates, and the pre-retirement mortality rates for females age 58 and older are 50% less than the female post-retirement mortality rates. (Adopted effective July 1, 2012.)

**Post-Retirement Disabled:**

Shown below for selected ages. (Adopted effective July 1, 2012.)

<b>Age</b>	<b>Male</b>	<b>Female</b>
20	3.08%	2.95%
25	3.08%	2.95%
30	3.08%	2.95%
35	3.08%	2.95%
40	3.08%	2.95%
45	2.16%	2.07%
50	2.16%	2.07%
55	2.16%	2.07%
60	2.16%	2.07%
65	3.08%	2.95%
70	4.62%	2.95%

**SECTION 4: Reporting Information for the State Teachers Retirement System of Ohio**

---

**Salary Increase Rates:** Shown below for selected ages. (Adopted effective July 1, 2012.)

<b>Age</b>	<b>Rate</b>
20	12.25%
25	12.25%
30	8.25%
35	7.45%
40	6.05%
45	5.50%
50	4.75%
55	4.25%
60	3.75%
65	3.25%
70	2.75%

**Payroll Growth Rate:** 3.50% per annum compounded annually for the next five years, 4.00% thereafter

**Percent Married:** For valuation purposes, 80% of male members and 60% of female members are assumed to be married. Male members are assumed to be one year older than their spouses, and female members are assumed to be three years younger than their spouses. (The assumed age difference adopted effective July 1, 2012.)

**Asset Valuation Method:** The actuarial value of assets is based on the market value of assets with a four-year phase-in of actual investment return in excess of (or less than) expected investment income. Expected investment income is determined using the assumed investment return rate and the actuarial value of assets (adjusted for receipts and disbursements during the year). The actual investment return for this purpose is determined net of all investment and administrative expenses. The actuarial value is further adjusted, if necessary, to be within 9% of the market value.

## SECTION 4: Reporting Information for the State Teachers Retirement System of Ohio

---

- Actuarial Cost Method:** Normal cost and actuarial accrued liability are calculated on an individual basis and are allocated by salary. Entry age is determined as the age at member's enrollment in STRS Ohio. The actuarial accrued liability is the difference between the total present value of future benefits and the actuarial present value of future normal costs. The unfunded actuarial accrued liability (UAAL) is the excess of the actuarial accrued liability over the actuarial value of assets.
- Amortization Period and Method:** The GASB Annual Required Contribution (ARC) is determined as the sum of (a) the employer normal cost rate, and (b) a level percentage of payroll required to amortize the unfunded actuarial accrued liability over a 30-year period.
- Census and Assets:** The valuation was based on members of the System as of July 1, 2013, and does not take into account future members. All census and asset data was supplied by the System.

**SECTION 4: Reporting Information for the State Teachers Retirement System of Ohio**

**Retirement Rates:** The following rates of retirement are assumed for members eligible to retire. (Retirement Rates for the Defined Benefit Plans were adopted effective July 1, 2013.)

Defined Benefit Plan – Current Rates through July 1, 2014				
	Male Rates			
Age	Under 25 Years of Service	25-29 Years of Service	30-34 Years of Service	35 or More Years of Service
52	0%	0%	20%	40%
53	0%	0%	10%	40%
54	0%	0%	10%	60%
55	0%	6%	10%	60%
56	0%	6%	10%	60%
57	0%	6%	15%	55%
58	0%	6%	15%	50%
59	0%	10%	15%	45%
60	10%	10%	15%	45%
61	10%	10%	15%	45%
62	12%	10%	15%	45%
63	12%	10%	10%	45%
64	12%	15%	10%	30%
65	20%	20%	10%	30%
66	20%	20%	10%	30%
67	15%	20%	10%	25%
68	15%	20%	10%	20%
69	15%	20%	10%	20%
70	15%	20%	10%	20%
71	15%	20%	10%	20%
72	15%	20%	10%	20%
73	15%	20%	10%	20%
74	15%	20%	10%	20%
75	100%	100%	100%	100%

Defined Benefit Plan – Current Rates through July 1, 2014				
	Female Rates			
Age	Under 25 Years of Service	25-29 Years of Service	30-34 Years of Service	35 or More Years of Service
52	0%	0%	20%	50%
53	0%	0%	10%	50%
54	0%	0%	10%	50%
55	0%	9%	10%	50%
56	0%	9%	15%	50%
57	0%	9%	15%	50%
58	0%	9%	15%	45%
59	0%	15%	20%	45%
60	10%	15%	25%	45%
61	10%	15%	25%	45%
62	10%	15%	25%	45%
63	10%	15%	30%	45%
64	15%	25%	30%	45%
65	25%	30%	30%	45%
66	20%	30%	30%	45%
67	20%	20%	30%	45%
68	20%	20%	30%	45%
69	20%	20%	30%	45%
70	20%	20%	30%	30%
71	20%	20%	30%	30%
72	20%	20%	30%	30%
73	20%	20%	30%	30%
74	20%	20%	30%	30%
75	100%	100%	100%	100%

**SECTION 4: Reporting Information for the State Teachers Retirement System of Ohio**

**Retirement Rates (continued):**

Defined Benefit Plan – Grandfathered Members				
	Male Rates			
Age	Under 25 Years of Service	25-29 Years of Service	30-34 Years of Service	35 or More Years of Service
52	0%	0%	20%	40%
53	0%	0%	20%	40%
54	0%	0%	20%	60%
55	0%	6%	20%	60%
56	0%	6%	20%	60%
57	0%	6%	20%	60%
58	0%	6%	20%	60%
59	0%	7%	20%	55%
60	10%	7%	20%	55%
61	10%	7%	20%	55%
62	12%	8%	20%	55%
63	12%	8%	12%	55%
64	12%	12%	12%	40%
65	20%	20%	12%	40%
66	20%	20%	12%	40%
67	15%	20%	12%	35%
68	15%	20%	12%	30%
69	15%	20%	12%	30%
70	15%	20%	12%	30%
71	15%	20%	12%	30%
72	15%	20%	12%	30%
73	15%	20%	12%	30%
74	15%	20%	12%	30%
75	100%	100%	100%	100%

Defined Benefit Plan – Grandfathered Members				
	Female Rates			
Age	Under 25 Years of Service	25-29 Years of Service	30-34 Years of Service	35 or More Years of Service
52	0%	0%	20%	50%
53	0%	0%	20%	50%
54	0%	0%	20%	60%
55	0%	9%	20%	60%
56	0%	9%	20%	60%
57	0%	9%	20%	60%
58	0%	9%	20%	55%
59	0%	10%	25%	55%
60	10%	10%	30%	55%
61	10%	10%	30%	55%
62	10%	12%	30%	55%
63	10%	12%	35%	55%
64	15%	20%	35%	55%
65	25%	30%	35%	55%
66	20%	30%	35%	55%
67	20%	20%	35%	55%
68	20%	20%	35%	55%
69	20%	20%	35%	55%
70	20%	20%	35%	40%
71	20%	20%	35%	40%
72	20%	20%	35%	40%
73	20%	20%	35%	40%
74	20%	20%	35%	40%
75	100%	100%	100%	100%

**SECTION 4: Reporting Information for the State Teachers Retirement System of Ohio**

**Retirement Rates (continued):**

Defined Benefit Plan – Non-grandfathered Members				
	Male Rates			
Age	Under 25 Years of Service	25-29 Years of Service	30-34 Years of Service*	35 or More Years of Service*
52			20%	20%
53			20%	20%
54			20%	20%
55		3%	20%	20%
56		3%	20%	20%
57		3%	20%	20%
58		3%	20%	20%
59		5%	20%	20%
60	5%	5%	20%	25%
61	6%	6%	20%	25%
62	7%	7%	20%	25%
63	8%	8%	12%	25%
64	10%	10%	12%	25%
65	20%	20%	12%	25%
66	20%	20%	12%	25%
67	15%	20%	12%	25%
68	15%	20%	12%	20%
69	15%	20%	12%	20%
70	15%	20%	12%	20%
71	15%	20%	12%	20%
72	15%	20%	12%	20%
73	15%	20%	12%	20%
74	15%	20%	12%	20%
75	100%	100%	100%	100%

Defined Benefit Plan – Non-grandfathered Members				
	Female Rates			
Age	Under 25 Years of Service	25-29 Years of Service	30-34 Years of Service*	35 or More Years of Service*
52			20%	20%
53			20%	20%
54			20%	20%
55		5%	20%	20%
56		5%	20%	20%
57		5%	20%	20%
58		5%	20%	20%
59		5%	25%	25%
60	5%	10%	30%	30%
61	6%	10%	30%	30%
62	7%	10%	30%	30%
63	8%	10%	35%	35%
64	12%	15%	35%	35%
65	25%	30%	35%	35%
66	20%	30%	35%	35%
67	20%	20%	35%	35%
68	20%	20%	35%	35%
69	20%	20%	35%	35%
70	20%	20%	35%	30%
71	20%	20%	35%	30%
72	20%	20%	35%	30%
73	20%	20%	35%	30%
74	20%	20%	35%	30%
75	100%	100%	100%	100%

*\*Use two times 25-29 years of service rates if not eligible for unreduced retirement (prior to age 65)*

**SECTION 4: Reporting Information for the State Teachers Retirement System of Ohio**

---

**Retirement Rates (continued):**

<b>Age</b>	<b>Combined Plan</b>	
	<b>Male</b>	<b>Female</b>
60	13%	22%
61	7%	9%
62	7%	9%
63	7%	9%
64	9%	15%
65	17%	20%
66	15%	13%
67	12%	13%
68	12%	12%
69	12%	12%
70	12%	12%
71	12%	12%
72	12%	12%
73	12%	12%
74	12%	12%
75	100%	100%

**Disability Rates:**

Shown below for selected ages. (Adopted effective July 1, 2012.)

<b>Age</b>	<b>Male</b>	<b>Female</b>
20	0.008%	0.010%
25	0.008%	0.010%
30	0.014%	0.011%
35	0.030%	0.033%
40	0.071%	0.060%
45	0.131%	0.083%
50	0.180%	0.120%
55	0.225%	0.150%
60	0.263%	0.175%
65	0.300%	0.200%



**SECTION 4: Reporting Information for the State Teachers Retirement System of Ohio**

---

**Termination Rates:**

Termination rates based on service, for causes other than death, disability, or retirement. (Adopted effective July 1, 2012.)

<b>Vested Terminations*</b>		
<b>Age</b>	<b>Male</b>	<b>Female</b>
20	11.25%	13.20%
25	11.25%	12.54%
30	2.40%	4.22%
35	1.96%	2.38%
40	1.62%	1.69%
45	2.00%	1.35%
50	2.00%	2.00%
55	4.00%	3.00%
60	4.00%	3.00%
65	0.00%	0.00%

*\* Termination rates cut out at first retirement eligibility*

<b>Non-Vested Terminations</b>		
<b>Service</b>	<b>Male</b>	<b>Female</b>
Under 1 Year	35.00%	35.00%
1 to 2 Years	25.00%	25.00%
2 to 3 Years	15.00%	15.00%
3 to 5 Years	10.00%	10.00%

**Percent Electing a Deferred Termination Benefit:**

50% of terminating members of the Defined Benefit Plan are assumed to elect deferred termination benefit. Termination benefits are assumed to commence at age 60 or the first age at which unreduced benefits are available, if earlier.

**SECTION 4: Reporting Information for the State Teachers Retirement System of Ohio**

---

**EXHIBIT VI**

**Summary of Plan Provisions**

---

**DEFINED BENEFIT PLAN**

**Eligibility for Membership**

Immediate upon commencement of employment.

**Service Retirement**

*Eligibility*

Age 60 with five years of service, or age 55 with 25 years of service, or 30 years of service regardless of age. Age and service requirements for retirement will increase effective August 1, 2015.

Effective August 1, 2015, service credit requirements for retirement with an unreduced benefit will increase as follows:

<b>Unreduced Benefit for Retirement Between:</b>	<b>Minimum Age and Years of Service</b>
Now–7/1/2015	Any age and 30 years; or age 65 and 5 years
8/1/2015–7/1/2017	Any age and 31 years; or age 65 and 5 years
8/1/2017–7/1/2019	Any age and 32 years; or age 65 and 5 years
8/1/2019–7/1/2021	Any age and 33 years; or age 65 and 5 years
8/1/2021–7/1/2023	Any age and 34 years; or age 65 and 5 years
8/1/2023–7/1/2026	Any age and 35 years; or age 65 and 5 years
8/1/2026	Age 60 and 35 years; or age 65 and 5 years

**SECTION 4: Reporting Information for the State Teachers Retirement System of Ohio**

---

**DEFINED BENEFIT PLAN (continued)**

*Amount*

Prior to July 1, 2015, annual amount equal to the greater of (a) 2.2% of final average salary for the three highest years of earnings, multiplied by years of total Ohio service credit, or 2.5% of final average salary for the three highest paid years if the member has 35 or more years of service credit multiplied by years of total Ohio service credit, except that for years of Ohio contributing service credit in excess of 30, the following percentages will apply:

<b>Year</b>	<b>Percentage</b>
31	2.5%
32	2.6
33	2.7
34	2.8
35	2.9
36	3.0
37	3.1
38	3.2
39	3.3

Or b) \$86 multiplied by years of service credit.

Effective August 1, 2015, annual amount equal to 2.2% of final average salary for the five highest years of earnings, multiplied by all years of service.

For members who are eligible to retire on July 1, 2015, annual amount will be greater of (a) the benefit amount calculated upon retirement under the new benefit formula, or (b) the benefit amount as of July 1, 2015 under the current formula.

Annual salary is subject to the limit under Section 401(a)(17).

Maximum benefit – The lesser of a) 100% of average annual salary or b) the limit as established by Section 415 of the Internal Revenue Code.

**SECTION 4: Reporting Information for the State Teachers Retirement System of Ohio**

---

**DEFINED BENEFIT PLAN (continued)**

Minimum benefit – money-purchase benefit, which includes member’s contributions with interest, plus matching employer contributions, provided as an annuity. Effective August 1, 2013, the money-purchase benefit was eliminated.

Prior to July 1, 2015, if the member has less than 30 years of service at retirement and is younger than age 65, the following reduction factors apply:

<b>Attained Age</b>	<b>or</b>	<b>Years of Ohio Service Credit</b>	<b>% of Base Amount</b>
58		25	75%
59		26	80
60		27	85
61		28	88
		28	90
62			91
63			94
		29	95
64			97
65		30 or more	100

Effective August 1, 2015, the service credit requirements for an actuarially reduced benefit are as follows:

<b>Actuarially Reduced Benefit for Retirement Between:</b>	<b>Minimum Age and Years of Service</b>
Now–7/1/2015	Age 55 and 25 years; or age 60 and 5 years
8/1/2015–7/1/2017	Any age and 30 years; or age 55 and 26 years; or age 60 and 5 years
8/1/2017–7/1/2019	Any age and 30 years; or age 55 and 27 years; or age 60 and 5 years
8/1/2019–7/1/2021	Any age and 30 years; or age 55 and 28 years; or age 60 and 5 years
8/1/2021–7/1/2023	Any age and 30 years; or age 55 and 29 years; or age 60 and 5 years
8/1/2023	Any age and 30 years; or age 60 and 5 years

The actuarially reduced benefit reflects a reduction for each year that the member retires before before meeting eligibility for an unreduced benefit.

**SECTION 4: Reporting Information for the State Teachers Retirement System of Ohio**

---

**DEFINED BENEFIT PLAN (continued)**

**Disability Retirement**

<i>Eligibility</i>	Membership before July 30, 1992, and election of this benefit, completion of five or more years of service, under age 60 and permanently incapacitated for the performance of duty.
<i>Amount</i>	<ol style="list-style-type: none"><li>1) Annuity with a reserve equal to the member's accumulated contributions, plus</li><li>2) The difference between (1) and the greater of 2% of the average salary during the three highest paid years or \$86 times total service plus years and months from date of disability to age 60. Maximum allowance is 75% of final average salary. Minimum allowance is 30% of final average salary.</li></ol>

**Disability Allowance**

<i>Eligibility</i>	Membership after July 29, 1992, or membership before July 30, 1992, and election of this benefit, completion of five or more years of qualifying service and permanently incapacitated for the performance of duty. For membership on or after July 1, 2013, completion of 10 years of qualifying service and permanently incapacitated for the performance of duty.
<i>Amount</i>	The greater of 2.2% of the average salary during the three highest paid years or \$86 times total service. Maximum allowance is 60% of final average salary. Minimum allowance is 45% of final average salary. The disability allowance payment terminates at age 65 (or later if payment begins after age 60). After termination of the disability allowance, the member may apply for service retirement.

**SECTION 4: Reporting Information for the State Teachers Retirement System of Ohio**

---

**DEFINED BENEFIT PLAN (continued)**

**Death after Retirement**

Lump sum payment of \$1,000 upon death after service or disability retirement.

**Survivor's Benefit**

*Eligibility*

Upon death after at least 1½ years of credit for Ohio service with at least 1/4 year of such service in the 2½ years preceding death or upon death of a disability retiree. For membership on or after July 1, 2013, upon death after at least five years of credit for Ohio service and died not later than one year after the date service terminated.

Qualified survivors will receive the highest benefit from among the following for which they are eligible: dependent-based benefit, service-based benefit, and retirement-based benefit.

Qualified beneficiaries are the spouse, dependent children, and/or dependent parents over age 65.

*Dependent-based benefit*

Monthly survivor benefits are determined according to the number of qualified survivors. These benefits are payable as a percentage of final average salary. The percentages are as follows:

<b>Number of Qualified Dependents</b>	<b>% of Final Average Salary</b>	<b>Minimum Annual Benefit</b>
1	25%	\$1,152
2	40	2,232
3	50	2,832
4	55	2,832
5 or more	60	2,832

**SECTION 4: Reporting Information for the State Teachers Retirement System of Ohio**

---

**DEFINED BENEFIT PLAN (continued)**

*Service-based benefit*

If a member has 20 or more years of service before death, monthly survivor benefits are determined according to the number of years of service credit. These benefits are payable as a percentage of final average salary. The percentages are as follows:

<b>Years of Service</b>	<b>% of Final Average Salary</b>
20	29%
21	33
22	37
23	41
24	45
25	48
26	51
27	54
28	57
29 or more	60

*Retirement-based benefit*

If a member dies after meeting service retirement eligibility, the monthly survivor benefit is determined as if the member had actually retired and provided the maximum joint and survivor benefit to the qualified survivor (Option 1). Early retirement reduction applies if the member is not eligible for unreduced benefit.

The primary beneficiary may withdraw the deceased member's account in lieu of receiving monthly benefits if there are no children who are qualified survivors.

**SECTION 4: Reporting Information for the State Teachers Retirement System of Ohio**

---

**DEFINED BENEFIT PLAN (continued)**

**Lump Sum Withdrawal Option**

In lieu of any other pension or survivor benefits, a member who leaves the System can receive his/her member contributions with interest in a lump sum according to the following schedule:

<u>Credit Service</u>	<u>Lump Sum</u>
Less than 3 Years	Member Contributions with 2% Interest
3 or More Years and Less than 5 Years	Member Contributions with 3% Interest
5 Years or More	150% of Member Contributions with 3% Interest

The Board has the authority to modify the interest credited to member contributions.

**Plans of Payment**

There are four basic plans of payment:

Plan I – Single Life Annuity: if a member chooses this plan at retirement and later marries, he/she may change the plan to a Joint and Survivor Annuity with his/her spouse as beneficiary within the first year of the marriage.

Plan II – Joint and Survivor Annuity: there are four options under this plan of payment:

- Options 1, 2 and 3 apply to a single primary beneficiary
- Option 4 applies to multiple primary beneficiaries



**DEFINED BENEFIT PLAN (continued)**

Plan III – Annuity Certain: if a death occurs before the guaranteed period ends, a beneficiary receives the same monthly benefit until the guaranteed period expires. If a member name more than one beneficiary, a lump sum payment, representing the present value of the remaining payments is divided equally and paid to the beneficiaries. If all beneficiaries die before the expiration of the certain period, the present value of all remaining payments is to be paid to the estate of the beneficiary last receiving payments

Plan IV – Partial Lump-Sum Option Plan: allows a member to take an amount from six to 36 times the monthly Single Life Annuity benefit in a lump sum at retirement. The remainder of a member’s lifetime benefits will be paid based on member’s selected plan of payment: Single Life Annuity, Joint and Survivor Annuity or Annuity Certain.

**Optional Forms of Benefit**

Option 1 - 100% joint and survivorship. Reduced retirement allowance payable to the member, continuing after the member's death, for life to the member's sole beneficiary named at retirement.

Option 2 - A joint and survivorship annuity payable during the lifetime of the member, with the member's sole beneficiary named at retirement to receive some other portion of the member's annuity after the member's death.

Option 3 - The sole member's reduced retirement allowance provided under Option 1 or Option 2 is to be paid after the member's death for life to the member's sole beneficiary named at retirement, except that in the event of the death of the sole beneficiary or termination of marriage between the retiree and the sole beneficiary, the retiree may elect to return to his single lifetime benefit equivalent, which would be available for an actuarially computed charge as determined by the Board. In the case of termination of marriage, the election may be made with the written consent of the beneficiary or by court order.

## SECTION 4: Reporting Information for the State Teachers Retirement System of Ohio

---

### DEFINED BENEFIT PLAN (continued)

Option 4 – Members who retire November 1, 2006, or later may elect a reduced benefit to provide continuing lifetime benefits for up to four primary beneficiaries under a Joint and Survivor Annuity. A member may specify percentages of his/her benefit or a flat dollar amount for each beneficiary; however, the total benefit amount payable to all beneficiaries cannot exceed the amount payable to the member.

#### **Cost-of-Living Benefits**

The basic benefit is increased each year by 2% of the original base benefit.

Members who retired before July 1, 2013, will not receive a COLA during the 2014 fiscal year. Members who retired effective July 1, 2013, will not receive a COLA on July 1, 2014. After missing one COLA, retirees will resume COLA at 2% per year.

For members retiring August 1, 2013, or later, the 2% COLA is paid on the fifth anniversary of the retirement benefit. Future annual increases are calculated on the original benefit and are not compounded.

#### **Health Care**

Retirees, their spouses and dependents are eligible for a comprehensive medical expense health care plan as may be offered by the Retirement Board, subject to changes in terms and conditions from time to time.

#### **Contribution**

##### *By Members*

11% of salary;

The member contribution rate is scheduled to increase to 12% of salary effective July 1, 2014, to 13% of salary effective July 1, 2015, and to 14% of salary effective July 1, 2016.

##### *By Employers*

14% of salaries of their employees who are members.

**SECTION 4: Reporting Information for the State Teachers Retirement System of Ohio**

---

**COMBINED PLAN**

**Eligibility for Membership**

New members hired on or after July 1, 2001, may elect in writing to participate in the Combined Plan.

**Service (Normal) Retirement**

*Eligibility*

Age 60 with five years of service.

*Amount*

The balance in the member's defined contribution account plus an annual amount equal to 1% of final average salary for the three highest paid years multiplied by years of total Ohio service credit.

Effective August 1, 2015, final average salary will be average of the member's five highest salary years.

Annual salary is subject to the limit under Section 401(a)(17).

**Vesting**

*Eligibility*

Completion of five years of service for the defined benefit portion. Member contributions and earnings are 100% vested at all times.

*Amount*

A member who terminates with 5 or more years of service credit can receive the actuarial equivalent present value of the defined benefit formula. Prior to age 50, a withdrawal must include both the defined benefit and defined contribution portions of the account.

**Early Retirement**

*Eligibility*

Before age 60 with five years of service

*Amount*

The normal retirement benefit commencing at age 60. At age 50 or after, a member who elects to withdraw the full value of the member's defined contribution account may receive the withdrawal value of the formula benefit in a single sum, or leave the formula benefit on account for a benefit payable at age 60. The member may withdraw the defined benefit portion of the account only if he or she is also withdrawing the defined contribution account.

**SECTION 4: Reporting Information for the State Teachers Retirement System of Ohio**

---

**COMBINED PLAN (continued)**

**Late Retirement**

*Eligibility* After age 60 with five years of service.

*Amount* The formula benefit described in the normal retirement section based on service credit and final average salary at termination without any actuarial adjustments.

**Disability Allowance**

*Eligibility* Completion of five or more years of service and permanently incapacitated for the performance of duty. For membership on or after July 1, 2013, completion of 10 years of qualifying service credit with STRS Ohio.

*Amount* Members have the option of receiving disability benefits under the disability allowance program of the Defined Benefit Plan. All contributions and investment gains in the member's defined contribution account are used to fund the benefit. At age 65, the disability allowance converts to a service retirement benefit with a 2.2% formula. Alternatively, the member's defined contribution account is available.

**Survivor's Benefit**

*Eligibility* Upon death after at least 1½ years of credit for Ohio service with at least 1/4 year of such service in the 2½ years preceding death or upon death of a disability retiree. For membership on or after July 1, 2013, upon death at least five years of qualifying service credit.

Qualified survivors have the option of receiving dependent-based, service-based or retirement-based benefits described under the Defined Benefit Plan. Both employer contributions and the member's contributions and any investment gains in the member's defined contribution account are used to fund the benefit. Survivors also have the option to withdraw the defined contribution and defined benefit portions of the Combined Plan account.

## SECTION 4: Reporting Information for the State Teachers Retirement System of Ohio

---

### COMBINED PLAN (continued)

#### Optional Forms of Payment Of Defined Benefit Portion

A lump sum of the actuarial equivalent of the defined benefit formula benefit. If a member withdraws the member's defined contribution account prior to age 50, the formula benefit is paid in a lump sum.

Joint and Survivorship Options - Options 1 through 4 described in the Defined Benefit Plan provisions are available. All alternative forms of payment are the actuarial equivalent of the single life annuity benefit payable at age 60.

#### Optional Forms of Payment Of Member's Defined Contribution Account

The actuarial equivalent of the member's defined contribution account can be paid on or after age 50 as a lifetime annuity. Options 1 through 4, described in the Defined Benefit Plan Provisions, are also available. The monthly annuity must be \$100 or more to receive the member's defined contribution account in the form of an annuity.

The vested amount of the member's defined contribution account upon termination of employment can be paid as a single lump sum. If a member takes a lump sum of the defined benefit formula benefit, the member must simultaneously withdraw the lump sum value of the member's contribution account in a single lump sum.

#### Cost-of-Living Benefits

Not available on the service retirement benefit. For disability and survivor benefits, the basic benefit is increased by the increase in the Consumer Price Index each year, but not to exceed 2% of the original base benefit.

Changes to the cost of living adjustment are described under the Defined Benefit Plan section.

#### Health Care

Retirees, their spouses and dependents eligible for a comprehensive medical expense health care plan as may be offered by the Retirement Board, subject to changes in terms and conditions from time to time.

**SECTION 4: Reporting Information for the State Teachers Retirement System of Ohio**

---

**COMBINED PLAN (continued)**

**Contribution**

*By Members*

11% of salary: 10% of salary is deposited into the member's defined contribution account and the remaining amount is applied to the Combined Plan.

The member contribution rate is scheduled to increase to 12% of salary effective July 1, 2014, to 13% of salary effective July 1, 2015, and to 14% of salary effective July 1, 2016.

*By Employers*

14% of salaries is used to fund the defined benefit formula and health care.

## SECTION 4: Reporting Information for the State Teachers Retirement System of Ohio

---

### DEFINED CONTRIBUTION PLAN

<b>Eligibility for Membership</b>	New members hired on or after July 1, 2001, may elect in writing to participate in the Defined Contribution Plan.
<b>Service (Normal) Retirement</b>	
<i>Eligibility</i>	Termination after age 50.
<i>Amount</i>	The balance in the member's defined contribution account.
<b>Vesting</b>	
<i>Eligibility</i>	Employer contributions and earnings on the member's account are vested after the first anniversary of membership. Effective July 1, 2013, members vest 20% per year in employer contributions and all gains and losses on those contributions. Member contributions and earnings are 100% vested immediately.
<i>Amount</i>	The balance in the member's defined contribution account.
<b>Early Retirement</b>	
<i>Eligibility</i>	Termination before age 50.
<i>Amount</i>	The balance in the member's defined contribution account.
<b>Disability Allowance</b>	
<i>Eligibility</i>	Permanently incapacitated for the performance of duty and termination of employment.
<i>Amount</i>	The balance in the member's defined contribution account. At age 50, other payment options are available, but employment must first be terminated.
<b>Survivor's Benefit</b>	
<i>Eligibility</i>	Upon death.
<i>Amount</i>	The balance in the member's defined contribution account. A spouse may either continue to manage the member's defined contribution account or withdraw the account.

**SECTION 4: Reporting Information for the State Teachers Retirement System of Ohio**

---

**DEFINED CONTRIBUTION PLAN (continued)**

<b>Optional Forms of Payment</b>	The actuarial equivalent of the member's defined contribution account can be paid on or after age 50 as a lifetime annuity. Plans of payments described in the Defined Benefit Plan Provisions are also available. The monthly annuity must be \$100 or more to receive the member's defined contribution account in the form of an annuity.
<b>Cost-of-Living Benefits</b>	Not available
<b>Health Care</b>	Not available.
<b>Contribution</b>	
<i>By Members</i>	11% of salary is deposited into the member's defined contribution account.  The member contribution rate is scheduled to increase to 12% of salary effective July 1, 2014, to 13% of salary effective July 1, 2015, and to 14% of salary effective July 1, 2016.
<i>By Employers</i>	9.5% of salary is deposited into the member's defined contribution account. 4.5% of salaries is used to amortize the unfunded actuarial accrued liability of the defined benefit plan.



## SECTION 4: Reporting Information for the State Teachers Retirement System of Ohio

---

---

### EXHIBIT VII

#### Summary of Plan Changes

---

##### 2012 Pension Reform Legislation

1. Member Contributions will increase from 10% to 14%, phased in 1% per year beginning July 1, 2013, through July 1, 2016.
2. Service credit requirements for retirement with an unreduced benefit will increase from 30 years to 35 years of service by August 1, 2023. Beginning August 1, 2026, a minimum age of 60 is required. This change will be phased in beginning August 1, 2015, when eligibility for unreduced benefits increases to 31 years of service. The service credit requirement increases by one year every other year (e.g., the eligibility requirement is 32 years at August 1, 2017, 33 years at August 1, 2019, etc.). An unreduced retirement benefit continues to be available at age 65 with a minimum of five years of service.
3. Service credit requirements for an actuarially reduced benefit will increase from age 55 with 25 years of service to 30 years of service by August 1, 2023. This change will be phased in beginning August 1, 2015, when eligibility for a reduced benefit increases to age 55 with 26 years of service or any age with 30 years of service. The service credit requirement increases by one year every other year (e.g., the eligibility requirement is age 55 with 27 years of service at August 1, 2017, age 55 with 28 years of service August 1, 2019, etc.). A retirement benefit continues to be available at age 60 with a minimum of five years of service; however, the benefit will be actuarially reduced beginning August 1, 2015.
4. Final average salary is changed to be the average of five highest years of earnings beginning August 1, 2015.
5. The current 35-year enhanced benefit formula will be eliminated after July 1, 2015. The new benefit formula is 2.2% for all years of service.
6. Members who retire before July 1, 2013, will not receive a cost-of-living adjustment (COLA) during the 2014 fiscal year. Members who retire effective July 1, 2013, will not receive a COLA on July 1, 2014. After missing one COLA, retirees will resume a COLA of 2% per year. Members retiring after July 1, 2013, will receive a 2% COLA, but it will not begin until the fifth anniversary of retirement.

## **SECTION 4: Reporting Information for the State Teachers Retirement System of Ohio**

---

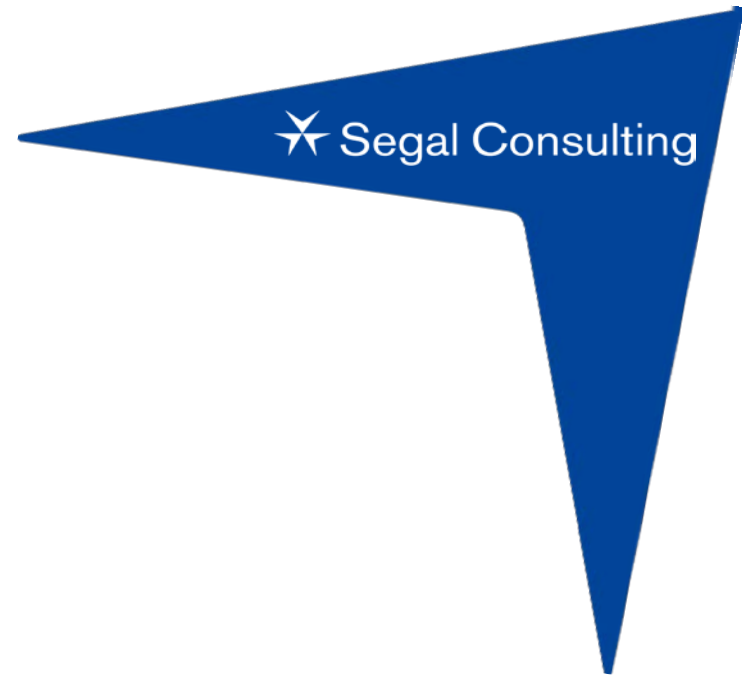
### **2012 Pension Reform Legislation (continued)**

7. Members who are eligible to retire on July 1, 2015, will continue to maintain retirement eligibility if they continue working, and the benefit will be the greater of (a) the benefit calculated upon retirement under the new formula, or (b) the benefit as of July 1, 2015, under the current formula.
8. The new law also provides the STRS Ohio Retirement Board with authority to make future adjustments to the member contribution rate, retirement age and service requirements and the COLA, depending on the retirement System's funding progress.

5375662v3/05930.003

# State Teachers Retirement System of Ohio

Appendix Tables for Actuarial Valuation and  
Review as of July 1, 2013



**State Teachers Retirement System of Ohio**

**TABLE 1  
THE NUMBER AND ANNUAL SALARIES OF DEFINED BENEFIT AND COMBINED  
PLAN ACTIVE MEMBERS DISTRIBUTED BY AGE AS OF JULY 1, 2013**

Age	Male		Female		Total	
	Number	Compensation*	Number	Compensation*	Number	Compensation*
18	0	0	2	52,337	2	52,337
19	3	24,256	1	8,458	4	32,714
20	4	32,094	3	28,100	7	60,194
21	9	53,388	14	98,254	23	151,643
22	21	256,699	126	1,585,936	147	1,842,635
23	249	4,168,572	964	19,099,743	1,213	23,268,315
24	548	11,192,911	1,679	38,480,525	2,227	49,673,436
25	733	17,132,758	1,991	52,752,781	2,724	69,885,539
26	783	20,810,163	2,295	68,685,251	3,078	89,495,414
27	849	25,828,335	2,476	82,537,479	3,325	108,365,814
28	1,047	35,417,991	2,811	99,877,420	3,858	135,295,411
29	1,032	37,416,678	2,933	111,888,024	3,965	149,304,701
30	1,175	45,387,286	2,992	119,025,991	4,167	164,413,277
31	1,269	52,268,501	3,316	139,054,685	4,585	191,323,187
32	1,264	56,225,385	3,344	144,614,843	4,608	200,840,229
33	1,280	59,089,591	3,430	156,326,047	4,710	215,415,638
34	1,367	69,627,163	3,561	170,032,535	4,928	239,659,697
35	1,436	75,103,500	3,556	175,819,981	4,992	250,923,482
36	1,452	80,254,886	3,634	186,634,068	5,086	266,888,954
37	1,447	83,345,807	3,237	170,093,699	4,684	253,439,505
38	1,382	81,305,057	3,326	175,966,701	4,708	257,271,758
39	1,482	86,524,051	3,435	187,526,954	4,917	274,051,005
40	1,381	83,755,319	3,342	182,378,770	4,723	266,134,088
41	1,413	86,509,472	3,431	189,222,174	4,844	275,731,646
42	1,480	91,900,268	3,902	217,289,911	5,382	309,190,179
43	1,533	97,672,728	3,961	220,524,767	5,494	318,197,496
44	1,448	93,441,708	3,671	209,781,748	5,119	303,223,456
45	1,377	88,301,011	3,558	197,570,948	4,935	285,871,960
46	1,299	83,320,341	3,406	191,259,978	4,705	274,580,319
47	1,264	83,950,357	3,146	182,391,958	4,410	266,342,314
48	1,267	82,994,171	2,933	172,502,856	4,200	255,497,028
49	1,201	78,846,202	2,977	173,095,841	4,178	251,942,044
50	1,187	81,598,795	3,051	181,746,086	4,238	263,344,881
51	1,234	83,016,685	3,118	186,985,458	4,352	270,002,143
52	1,185	83,268,504	3,006	180,291,287	4,191	263,559,790
53	1,099	76,301,435	2,778	164,232,122	3,877	240,533,556
54	1,051	71,270,293	2,748	162,583,645	3,799	233,853,937
55	1,047	73,132,293	2,709	165,132,562	3,756	238,264,855

Age	Male		Female		Total	
	Number	Compensation*	Number	Compensation*	Number	Compensation*
56	1,071	75,137,831	2,942	181,336,668	4,013	256,474,500
57	1,012	72,070,351	2,622	157,365,356	3,634	229,435,707
58	934	66,263,090	2,433	145,773,614	3,367	212,036,704
59	895	59,699,004	2,351	144,812,840	3,246	204,511,844
60	812	55,795,544	1,949	120,437,135	2,761	176,232,679
61	755	52,194,973	1,764	108,166,209	2,519	160,361,181
62	688	46,407,581	1,524	93,038,565	2,212	139,446,146
63	593	38,828,183	1,249	76,070,928	1,842	114,899,111
64	538	37,032,168	1,051	63,805,551	1,589	100,837,719
65	457	31,701,571	749	43,692,521	1,206	75,394,093
66	405	29,506,432	527	29,717,785	932	59,224,217
67	285	17,345,051	339	17,710,137	624	35,055,187
68	191	11,928,125	219	11,459,123	410	23,387,248
69	164	10,144,169	165	7,914,852	329	18,059,021
70	130	8,385,973	113	5,675,668	243	14,061,641
71	127	5,907,574	84	3,570,397	211	9,477,971
72	86	6,041,926	60	2,285,326	146	8,327,251
73	64	2,749,612	46	2,048,811	110	4,798,423
74	56	2,928,265	33	1,837,110	89	4,765,375
75	51	2,584,646	22	328,190	73	2,912,836
76	41	2,743,610	17	595,813	58	3,339,423
77	26	1,582,493	15	527,196	41	2,109,689
78	27	1,340,451	11	286,385	38	1,626,836
79	15	528,754	9	156,660	24	685,413
80	10	511,522	8	232,227	18	743,749
81	11	299,137	5	269,600	16	568,737
82	9	364,418	5	241,287	14	605,706
83	1	4,423	1	7,200	2	11,623
84	5	236,923	2	17,574	7	254,497
85	3	182,420	0	0	3	182,420
86	2	124,367	0	0	2	124,367
87	2	32,409	0	0	2	32,409
88	1	5,400	0	0	1	5,400
89	1	3,150	0	0	1	3,150
90	0	0	0	0	0	0
91	0	0	0	0	0	0
92	1	118,630	0	0	1	118,630
Total	48,767	\$2,821,474,831	121,178	\$6,296,560,652	169,945	\$9,118,035,483

\* Compensation for the period ending June 30, 2012

State Teachers Retirement System of Ohio

**TABLE 2  
THE NUMBER AND ANNUAL SALARIES OF DEFINED BENEFIT AND COMBINED PLAN  
ACTIVE MEMBERS DISTRIBUTED BY YEARS OF SERVICE AS OF JULY 1, 2013**

Years of Service	Male		Female		Total	
	Number	Compensation*	Number	Compensation*	Number	Compensation*
0	2,969	35,565,967	5,267	55,726,930	8,236	91,292,897
1	3,960	96,834,515	8,435	193,525,255	12,395	290,359,769
2	2,658	79,074,590	6,242	179,993,472	8,900	259,068,061
3	2,347	81,013,464	5,333	173,921,486	7,680	254,934,950
4	2,156	83,602,077	5,229	189,872,160	7,385	273,474,237
5	2,063	90,187,879	5,237	208,723,925	7,300	298,911,804
6	1,778	82,278,470	5,166	218,571,194	6,944	300,849,664
7	1,773	91,486,435	4,703	215,507,716	6,476	306,994,151
8	1,657	89,244,382	4,583	217,185,666	6,240	306,430,047
9	1,497	84,829,994	4,327	217,163,500	5,824	301,993,494
10	1,518	90,637,068	4,228	223,494,064	5,746	314,131,133
11	1,637	102,736,292	4,509	250,509,021	6,146	353,245,313
12	1,728	111,677,612	4,815	279,780,859	6,543	391,458,471
13	1,668	113,826,311	4,681	280,913,552	6,349	394,739,863
14	1,724	121,741,118	4,717	293,439,177	6,441	415,180,294
15	1,526	109,635,200	4,246	274,484,010	5,772	384,119,210
16	1,477	107,607,125	3,857	253,823,631	5,334	361,430,756
17	1,404	106,948,255	3,495	234,979,663	4,899	341,927,918
18	1,278	99,058,023	3,317	226,156,366	4,595	325,214,388
19	1,254	97,561,433	3,199	221,199,249	4,453	318,760,682
20	1,159	94,167,171	2,980	210,165,972	4,139	304,333,143
21	967	79,841,020	2,505	178,157,833	3,472	257,998,854
22	964	82,800,526	2,434	176,166,996	3,398	258,967,523
23	914	79,565,474	2,370	173,059,116	3,284	252,624,590
24	858	75,026,123	2,209	161,871,739	3,067	236,897,862
25	807	70,994,412	1,883	140,860,413	2,690	211,854,825
26	724	66,577,191	1,809	134,975,910	2,533	201,553,101
27	750	66,313,510	1,655	124,655,753	2,405	190,969,263
28	818	73,159,421	1,835	136,789,532	2,653	209,948,953

Years of Service	Male		Female		Total	
	Number	Compensation*	Number	Compensation*	Number	Compensation*
29	689	60,578,085	1,665	125,035,842	2,354	185,613,927
30	374	36,118,428	902	68,116,296	1,276	104,234,723
31	255	25,294,040	520	40,297,891	775	65,591,932
32	229	21,787,892	459	35,562,388	688	57,350,280
33	389	35,912,653	843	64,568,473	1,232	100,481,126
34	417	38,082,258	911	68,401,243	1,328	106,483,501
35	141	14,067,281	292	23,213,581	433	37,280,862
36	67	6,643,957	129	9,966,283	196	16,610,240
37	49	5,342,646	74	6,073,165	123	11,415,811
38	36	3,276,088	43	3,334,972	79	6,611,060
39	15	2,065,512	28	2,454,335	43	4,519,847
40	13	1,474,815	15	1,161,161	28	2,635,975
41	11	1,192,941	9	929,903	20	2,122,845
42	7	809,970	2	116,323	9	926,293
43	6	674,757	3	257,052	9	931,808
44	9	1,076,359	4	256,240	13	1,332,599
45	7	715,923	6	489,609	13	1,205,532
46	5	537,121	0	0	5	537,121
47	6	676,640	1	141,020	7	817,660
48	3	384,953	3	298,101	6	683,054
49	4	564,603	0	0	4	564,603
50	0	0	0	0	0	0
51	1	103,603	1	68,769	2	172,372
52	0	0	1	73,482	1	73,482
53	0	0	0	0	0	0
54	0	0	1	70,366	1	70,366
55	1	103,248	0	0	1	103,248
Total	48,767	\$2,821,474,831	121,178	\$6,296,560,652	169,945	\$9,118,035,483

\* Compensation for the period ending June 30, 2012

**State Teachers Retirement System of Ohio**

**TABLE 3  
THE NUMBER AND ANNUAL SALARIES OF COMBINED PLAN ACTIVE MEMBERS  
DISTRIBUTED BY AGE AS OF JULY 1, 2013**

Age	Male		Female		Total	
	Number	Compensation*	Number	Compensation*	Number	Compensation*
22	0	0	3	31,852	3	31,852
23	10	156,532	47	1,027,802	57	1,184,334
24	17	393,993	94	2,208,621	111	2,602,614
25	24	663,010	104	3,055,849	128	3,718,859
26	24	727,062	79	2,482,653	103	3,209,715
27	19	557,123	99	3,531,574	118	4,088,697
28	17	615,536	130	4,776,787	147	5,392,323
29	30	1,174,374	130	5,027,468	160	6,201,841
30	21	892,274	113	4,783,560	134	5,675,834
31	20	864,224	129	5,758,196	149	6,622,420
32	21	1,048,285	141	6,681,721	162	7,730,005
33	37	1,859,769	155	7,458,561	192	9,318,330
34	45	2,320,507	150	7,079,189	195	9,399,696
35	41	2,080,533	154	8,078,413	195	10,158,947
36	32	1,900,284	148	8,068,126	180	9,968,410
37	37	2,701,654	112	5,948,784	149	8,650,438
38	39	2,306,202	113	6,106,145	152	8,412,346
39	34	1,966,231	121	6,881,898	155	8,848,129
40	36	2,246,593	100	5,102,147	136	7,348,740
41	28	1,488,212	86	4,520,486	114	6,008,698
42	26	1,318,341	104	5,184,900	130	6,503,241
43	38	2,332,465	101	4,641,508	139	6,973,973
44	33	2,114,841	78	3,896,374	111	6,011,215
45	41	2,682,235	94	4,337,997	135	7,020,232
46	27	1,422,851	87	4,025,159	114	5,448,010
47	29	1,574,373	87	4,739,182	116	6,313,555
48	28	1,961,578	91	4,786,689	119	6,748,267
49	21	1,337,207	78	4,188,678	99	5,525,885
50	27	1,897,418	75	4,371,971	102	6,269,389

Age	Male		Female		Total	
	Number	Compensation*	Number	Compensation*	Number	Compensation*
51	14	793,869	89	4,428,391	103	5,222,260
52	14	1,019,089	86	4,545,551	100	5,564,640
53	23	1,020,951	91	4,146,187	114	5,167,138
54	25	1,685,371	75	3,832,163	100	5,517,534
55	18	950,505	54	2,719,477	72	3,669,982
56	18	1,174,742	76	4,175,758	94	5,350,500
57	21	1,118,317	69	3,490,664	90	4,608,981
58	16	730,580	55	2,823,181	71	3,553,760
59	23	1,455,962	50	2,674,544	73	4,130,506
60	16	745,218	49	2,621,845	65	3,367,063
61	15	531,368	40	1,990,077	55	2,521,445
62	12	568,041	23	1,209,251	35	1,777,293
63	11	431,691	18	887,832	29	1,319,523
64	7	385,128	14	772,209	21	1,157,337
65	4	54,039	11	375,377	15	429,416
66	8	233,193	5	206,517	13	439,710
67	9	323,034	2	17,707	11	340,741
68	1	4,765	3	219,662	4	224,427
69	3	65,519	3	134,820	6	200,339
70	2	120,850	1	20,737	3	141,587
71	3	22,254	0	0	3	22,254
72	1	5,175	1	7,791	2	12,966
73	1	14,706	0	0	1	14,706
74	1	17,877	0	0	1	17,877
75	0	0	0	0	0	0
76	1	10,035	1	20,165	2	30,200
Total	1,069	\$56,085,988	3,819	\$180,102,195	4,888	\$236,188,183

\* Compensation for the period ending June 30, 2012

State Teachers Retirement System of Ohio

**TABLE 4  
THE NUMBER AND ANNUAL SALARIES OF  
COMBINED PLAN ACTIVE MEMBERS  
DISTRIBUTED BY YEARS OF SERVICE AS OF JULY 1, 2013**

Years of Service	Male		Female		Total	
	Number	Compensation*	Number	Compensation*	Number	Compensation*
0	53	556,359	124	1,294,752	177	1,851,111
1	125	4,370,691	388	9,915,347	513	14,286,038
2	87	3,265,735	289	9,649,465	376	12,915,199
3	85	3,243,438	231	8,667,522	316	11,910,959
4	59	2,493,210	208	8,042,865	267	10,536,075
5	70	3,411,132	256	10,751,948	326	14,163,080
6	62	3,238,112	231	10,444,211	293	13,682,323
7	71	4,632,826	222	10,491,475	293	15,124,301
8	52	3,153,759	230	11,448,369	282	14,602,128
9	51	3,154,129	219	11,690,204	270	14,844,333
10	42	2,648,686	217	11,602,244	259	14,250,930
11	65	4,160,424	240	14,289,076	305	18,449,500
12	65	4,484,881	244	15,277,223	309	19,762,104
13	39	2,809,806	200	12,671,280	239	15,481,085
14	54	3,730,075	203	12,873,956	257	16,604,031
15	46	3,628,255	149	9,661,038	195	13,289,293
16	36	2,615,109	134	9,034,549	170	11,649,659
17	7	489,363	34	2,296,673	41	2,786,035
Total	1,069	\$56,085,988	3,819	\$180,102,195	4,888	\$236,188,183

\* Compensation for the period ending June 30, 2012

**State Teachers Retirement System of Ohio**

**TABLE 5**

**THE NUMBER AND ANNUAL SALARIES OF DEFINED BENEFIT ACTIVE MEMBERS  
DISTRIBUTED BY AGE AS OF JULY 1, 2013**

Age	Male		Female		Total		Age	Male		Female		Total	
	Number	Compensation*	Number	Compensation*	Number	Compensation*		Number	Compensation*	Number	Compensation*	Number	Compensation*
18	0	0	2	52,337	2	52,337	56	1,053	73,963,089	2,866	177,160,910	3,919	251,123,999
19	3	24,256	1	8,458	4	32,714	57	991	70,952,034	2,553	153,874,692	3,544	224,826,726
20	4	32,094	3	28,100	7	60,194	58	918	65,532,511	2,378	142,950,433	3,296	208,482,944
21	9	53,388	14	98,254	23	151,643	59	872	58,243,042	2,301	142,138,296	3,173	200,381,339
22	21	256,699	123	1,554,084	144	1,810,783	60	796	55,050,326	1,900	117,815,290	2,696	172,865,617
23	239	4,012,040	917	18,071,941	1,156	22,083,981	61	740	51,663,604	1,724	106,176,132	2,464	157,839,736
24	531	10,798,918	1,585	36,271,905	2,116	47,070,823	62	676	45,839,539	1,501	91,829,314	2,177	137,668,853
25	709	16,469,748	1,887	49,696,933	2,596	66,166,681	63	582	38,396,492	1,231	75,183,096	1,813	113,579,588
26	759	20,083,101	2,216	66,202,598	2,975	86,285,699	64	531	36,647,040	1,037	63,033,341	1,568	99,680,381
27	830	25,271,212	2,377	79,005,906	3,207	104,277,117	65	453	31,647,533	738	43,317,144	1,191	74,964,677
28	1,030	34,802,455	2,681	95,100,632	3,711	129,903,088	66	397	29,273,239	522	29,511,269	919	58,784,507
29	1,002	36,242,304	2,803	106,860,556	3,805	143,102,860	67	276	17,022,017	337	17,692,430	613	34,714,446
30	1,154	44,495,013	2,879	114,242,431	4,033	158,737,443	68	190	11,923,360	216	11,239,461	406	23,162,821
31	1,249	51,404,278	3,187	133,296,489	4,436	184,700,767	69	161	10,078,650	162	7,780,033	323	17,858,683
32	1,243	55,177,101	3,203	137,933,122	4,446	193,110,223	70	128	8,265,123	112	5,654,931	240	13,920,054
33	1,243	57,229,822	3,275	148,867,486	4,518	206,097,308	71	124	5,885,320	84	3,570,397	208	9,455,717
34	1,322	67,306,655	3,411	162,953,346	4,733	230,260,001	72	85	6,036,751	59	2,277,535	144	8,314,285
35	1,395	73,022,967	3,402	167,741,568	4,797	240,764,535	73	63	2,734,906	46	2,048,811	109	4,783,717
36	1,420	78,354,602	3,486	178,565,942	4,906	256,920,543	74	55	2,910,388	33	1,837,110	88	4,747,498
37	1,410	80,644,153	3,125	164,144,915	4,535	244,789,067	75	51	2,584,646	22	328,190	73	2,912,836
38	1,343	78,998,856	3,213	169,860,556	4,556	248,859,412	76	40	2,733,575	16	575,648	56	3,309,223
39	1,448	84,557,820	3,314	180,645,056	4,762	265,202,876	77	26	1,582,493	15	527,196	41	2,109,689
40	1,345	81,508,726	3,242	177,276,623	4,587	258,785,349	78	27	1,340,451	11	286,385	38	1,626,836
41	1,385	85,021,260	3,345	184,701,688	4,730	269,722,948	79	15	528,754	9	156,660	24	685,413
42	1,454	90,581,927	3,798	212,105,010	5,252	302,686,937	80	10	511,522	8	232,227	18	743,749
43	1,495	95,340,264	3,860	215,883,259	5,355	311,223,523	81	11	299,137	5	269,600	16	568,737
44	1,415	91,326,867	3,593	205,885,374	5,008	297,212,241	82	9	364,418	5	241,287	14	605,706
45	1,336	85,618,776	3,464	193,232,951	4,800	278,851,727	83	1	4,423	1	7,200	2	11,623
46	1,272	81,897,489	3,319	187,234,819	4,591	269,132,308	84	5	236,923	2	17,574	7	254,497
47	1,235	82,375,983	3,059	177,652,776	4,294	260,028,759	85	3	182,420	0	0	3	182,420
48	1,239	81,032,593	2,842	167,716,167	4,081	248,748,760	86	2	124,367	0	0	2	124,367
49	1,180	77,508,995	2,899	168,907,163	4,079	246,416,158	87	2	32,409	0	0	2	32,409
50	1,160	79,701,377	2,976	177,374,114	4,136	257,075,492	88	1	5,400	0	0	1	5,400
51	1,220	82,222,816	3,029	182,557,068	4,249	264,779,883	89	1	3,150	0	0	1	3,150
52	1,171	82,249,414	2,920	175,745,736	4,091	257,995,150	90	0	0	0	0	0	0
53	1,076	75,280,483	2,687	160,085,935	3,763	235,366,418	91	0	0	0	0	0	0
54	1,026	69,584,922	2,673	158,751,482	3,699	228,336,404	92	1	118,630	0	0	1	118,630
55	1,029	72,181,788	2,655	162,413,085	3,684	234,594,873	Total	47,698	\$2,765,388,843	117,359	\$6,116,458,457	165,057	\$8,881,847,300

\* Compensation for the period ending June 30, 2012



**State Teachers Retirement System of Ohio**

**TABLE 6**

**THE NUMBER AND ANNUAL SALARIES OF DEFINED BENEFIT ACTIVE MEMBERS  
DISTRIBUTED BY YEARS OF SERVICE AS OF JULY 1, 2013**

Years of Service	Male		Female		Total	
	Number	Compensation*	Number	Compensation*	Number	Compensation*
0	2,916	35,009,608	5,143	54,432,178	8,059	89,441,786
1	3,835	92,463,824	8,047	183,609,907	11,882	276,073,731
2	2,571	75,808,855	5,953	170,344,007	8,524	246,152,862
3	2,262	77,770,027	5,102	165,253,964	7,364	243,023,991
4	2,097	81,108,867	5,021	181,829,296	7,118	262,938,163
5	1,993	86,776,747	4,981	197,971,976	6,974	284,748,724
6	1,716	79,040,358	4,935	208,126,984	6,651	287,167,342
7	1,702	86,853,609	4,481	205,016,242	6,183	291,869,851
8	1,605	86,090,622	4,353	205,737,296	5,958	291,827,919
9	1,446	81,675,865	4,108	205,473,295	5,554	287,149,161
10	1,476	87,988,382	4,011	211,891,821	5,487	299,880,203
11	1,572	98,575,868	4,269	236,219,945	5,841	334,795,813
12	1,663	107,192,731	4,571	264,503,636	6,234	371,696,367
13	1,629	111,016,506	4,481	268,242,272	6,110	379,258,778
14	1,670	118,011,043	4,514	280,565,221	6,184	398,576,264
15	1,480	106,006,945	4,097	264,822,972	5,577	370,829,918
16	1,441	104,992,016	3,723	244,789,081	5,164	349,781,098
17	1,397	106,458,892	3,461	232,682,990	4,858	339,141,882
18	1,278	99,058,023	3,317	226,156,366	4,595	325,214,388
19	1,254	97,561,433	3,199	221,199,249	4,453	318,760,682
20	1,159	94,167,171	2,980	210,165,971	4,139	304,333,143
21	967	79,841,020	2,505	178,157,833	3,472	257,998,854
22	964	82,800,526	2,434	176,166,996	3,398	258,967,523
23	914	79,565,474	2,370	173,059,116	3,284	252,624,590
24	858	75,026,123	2,209	161,871,739	3,067	236,897,862
25	807	70,994,412	1,883	140,860,413	2,690	211,854,825
26	724	66,577,191	1,809	134,975,910	2,533	201,553,101
27	750	66,313,510	1,655	124,655,753	2,405	190,969,263
28	818	73,159,421	1,835	136,789,532	2,653	209,948,953

Years of Service	Male		Female		Total	
	Number	Compensation*	Number	Compensation*	Number	Compensation*
29	689	60,578,085	1,665	125,035,842	2,354	185,613,927
30	374	36,118,428	902	68,116,296	1,276	104,234,723
31	255	25,294,040	520	40,297,891	775	65,591,932
32	229	21,787,892	459	35,562,388	688	57,350,280
33	389	35,912,653	843	64,568,473	1,232	100,481,126
34	417	38,082,258	911	68,401,242	1,328	106,483,501
35	141	14,067,281	292	23,213,581	433	37,280,862
36	67	6,643,957	129	9,966,283	196	16,610,240
37	49	5,342,646	74	6,073,165	123	11,415,811
38	36	3,276,088	43	3,334,972	79	6,611,060
39	15	2,065,512	28	2,454,335	43	4,519,847
40	13	1,474,815	15	1,161,161	28	2,635,975
41	11	1,192,941	9	929,903	20	2,122,845
42	7	809,970	2	116,323	9	926,293
43	6	674,757	3	257,052	9	931,808
44	9	1,076,359	4	256,240	13	1,332,599
45	7	715,923	6	489,609	13	1,205,532
46	5	537,121	0	0	5	537,121
47	6	676,640	1	141,020	7	817,660
48	3	384,953	3	298,101	6	683,054
49	4	564,603	0	0	4	564,603
50	0	0	0	0	0	0
51	1	103,603	1	68,769	2	172,372
52	0	0	1	73,482	1	73,482
53	0	0	0	0	0	0
54	0	0	1	70,366	1	70,366
55	1	103,248	0	0	1	103,248
Total	47,698	\$2,765,388,843	117,359	\$6,116,458,457	165,057	\$8,881,847,300

\* Compensation for the period ending June 30, 2012

State Teachers Retirement System of Ohio

**TABLE 7**  
**THE NUMBER OF DEFINED BENEFIT AND COMBINED PLAN INACTIVE MEMBERS**  
**ELIGIBLE FOR FUTURE ALLOWANCE DISTRIBUTED BY AGE AS OF JULY 1, 2013**

Age	Male	Female	Total
28	3	13	16
29	6	50	56
30	18	89	107
31	19	131	150
32	33	185	218
33	39	234	273
34	41	300	341
35	56	288	344
36	73	356	429
37	73	320	393
38	83	294	377
39	96	380	476
40	74	339	413
41	80	356	436
42	102	361	463
43	96	410	506
44	100	353	453
45	103	371	474
46	116	378	494
47	109	334	443
48	113	298	411
49	126	329	455
50	109	371	480
51	114	341	455
52	136	365	501
53	146	370	516
54	143	382	525
55	157	399	556
56	164	423	587
57	186	467	653
58	197	520	717
59	196	551	747
60	176	481	657
61	155	407	562
62	149	343	492
63	106	295	401
64	120	256	376

Age	Male	Female	Total
65	101	205	306
66	86	130	216
67	53	108	161
68	34	81	115
69	41	87	128
70	36	61	97
71	12	26	38
72	2	10	12
73	2	9	11
74	3	3	6
75	3	5	8
76	2	3	5
77	4	0	4
78	0	2	2
79	2	0	2
80	0	3	3
81	1	0	1
82	1	1	2
83	2	1	3
84	1	2	3
85	1	0	1
86	0	0	0
87	0	0	0
88	1	1	2
89	0	0	0
90	0	1	1
91	0	0	0
92	0	0	0
93	0	0	0
94	0	0	0
95	0	0	0
96	0	0	0
97	0	0	0
98	0	0	0
99	0	1	1
Total	4,201	12,880	17,081

State Teachers Retirement System of Ohio

**TABLE 8**  
**THE NUMBER OF DEFINED BENEFIT AND COMBINED PLAN INACTIVE MEMBERS**  
**ELIGIBLE FOR REFUNDS ONLY DISTRIBUTED BY AGE AS OF JULY 1, 2013**

Age	Male	Female	Total
Unknown	123	2,687	2,810
18	1	1	2
19	2	6	8
20	2	7	9
21	7	5	12
22	9	22	31
23	68	179	247
24	154	484	638
25	386	885	1,271
26	576	1,274	1,850
27	728	1,534	2,262
28	831	1,789	2,620
29	938	1,988	2,926
30	973	2,057	3,030
31	1,085	2,354	3,439
32	1,101	2,352	3,453
33	1,212	2,482	3,694
34	1,272	2,413	3,685
35	1,203	2,317	3,520
36	1,174	2,356	3,530
37	1,141	2,079	3,220
38	1,139	2,044	3,183
39	1,160	1,927	3,087
40	1,091	1,971	3,062
41	1,153	2,017	3,170
42	1,287	2,238	3,525
43	1,285	2,429	3,714
44	1,292	2,174	3,466
45	1,220	2,170	3,390
46	1,167	2,009	3,176
47	1,255	1,952	3,207
48	1,256	1,998	3,254

Age	Male	Female	Total
49	1,304	2,034	3,338
50	1,270	1,999	3,269
51	1,244	2,083	3,327
52	1,170	2,001	3,171
53	1,217	2,032	3,249
54	1,218	2,046	3,264
55	1,307	1,958	3,265
56	1,226	1,987	3,213
57	1,250	1,904	3,154
58	1,204	1,851	3,055
59	1,277	1,895	3,172
60	1,262	1,771	3,033
61	1,190	1,702	2,892
62	1,105	1,626	2,731
63	1,016	1,372	2,388
64	975	1,284	2,259
65	926	1,084	2,010
66	867	1,040	1,907
67	670	782	1,452
68	496	536	1,032
69	318	449	767
70	382	454	836
71	201	252	453
72	40	46	86
73	30	30	60
74	21	23	44
75	26	16	42
76	14	11	25
77	12	5	17
78	13	11	24
79	7	3	10
80	6	2	8

Age	Male	Female	Total
81	5	3	8
82	2	3	5
83	1	1	2
84	0	0	0
85	3	4	7
86	2	2	4
87	1	2	3
88	0	0	0
89	2	3	5
90	1	0	1
91	1	1	2
92	0	1	1
93	2	0	2
94	0	1	1
95	0	1	1
96	0	0	0
97	1	1	2
98	1	0	1
99	2	1	3
100	0	0	0
101	0	2	2
102	2	0	2
103	0	0	0
104	0	3	3
105	0	1	1
106	0	0	0
107	1	1	2
108	1	1	2
109	0	1	1
Total	49,583	86,522	136,105

**State Teachers Retirement System of Ohio**

**TABLE 9  
THE NUMBER OF INACTIVE COMBINED PLAN MEMBERS ELIGIBLE FOR  
FUTURE ALLOWANCES DISTRIBUTED BY AGE AS OF JULY 1, 2013**

Age	Male	Female	Total
28	0	2	2
29	0	2	2
30	0	4	4
31	1	5	6
32	1	4	5
33	5	10	15
34	1	19	20
35	1	18	19
36	0	20	20
37	1	17	18
38	2	15	17
39	3	13	16
40	3	8	11
41	2	11	13
42	1	8	9
43	2	10	12
44	2	7	9
45	4	9	13
46	2	7	9
47	4	9	13
48	2	7	9
49	2	4	6
50	1	9	10
51	2	6	8

Age	Male	Female	Total
52	3	9	12
53	0	4	4
54	2	8	10
55	3	2	5
56	3	7	10
57	1	12	13
58	0	3	3
59	1	8	9
60	2	8	10
61	1	2	3
62	0	4	4
63	0	2	2
64	0	1	1
65	2	2	4
66	1	0	1
67	1	1	2
68	0	0	0
69	0	0	0
70	3	1	4
71	1	0	1
72	0	0	0
73	1	0	1
Total	67	298	365

State Teachers Retirement System of Ohio

**TABLE 10**  
**THE NUMBER OF INACTIVE COMBINED PLAN MEMBERS ELIGIBLE FOR**  
**REFUNDS ONLY DISTRIBUTED BY AGE AS OF JULY 1, 2013**  
**AGE AS OF JULY 1, 2013**

Age	Male	Female	Total
23	0	6	6
24	3	11	14
25	3	19	22
26	6	22	28
27	9	18	27
28	4	29	33
29	4	24	28
30	10	30	40
31	4	26	30
32	10	34	44
33	4	30	34
34	7	18	25
35	5	29	34
36	7	28	35
37	8	27	35
38	3	18	21
39	5	25	30
40	8	24	32
41	1	25	26
42	6	23	29
43	7	24	31
44	7	25	32
45	6	21	27
46	6	24	30
47	10	23	33
48	8	14	22
49	8	20	28
50	5	16	21

Age	Male	Female	Total
51	10	26	36
52	13	19	32
53	9	23	32
54	14	21	35
55	8	24	32
56	8	12	20
57	7	18	25
58	11	11	22
59	10	14	24
60	7	18	25
61	10	15	25
62	4	9	13
63	5	5	10
64	7	10	17
65	4	2	6
66	2	5	7
67	1	3	4
68	0	1	1
69	0	3	3
70	0	3	3
71	0	0	0
72	0	1	1
73	1	0	1
74	0	0	0
75	0	0	0
76	1	0	1
Total	296	876	1,172

**State Teachers Retirement System of Ohio**

**TABLE 11  
THE NUMBER OF INACTIVE DEFINED BENEFIT MEMBERS ELIGIBLE  
FOR FUTURE ALLOWANCES DISTRIBUTED BY AGE AS OF JULY 1, 2013**

Age	Male	Female	Total
28	3	11	14
29	6	48	54
30	18	85	103
31	18	126	144
32	32	181	213
33	34	224	258
34	40	281	321
35	55	270	325
36	73	336	409
37	72	303	375
38	81	279	360
39	93	367	460
40	71	331	402
41	78	345	423
42	101	353	454
43	94	400	494
44	98	346	444
45	99	362	461
46	114	371	485
47	105	325	430
48	111	291	402
49	124	325	449
50	108	362	470
51	112	335	447
52	133	356	489
53	146	366	512
54	141	374	515
55	154	397	551
56	161	416	577
57	185	455	640
58	197	517	714
59	195	543	738
60	174	473	647
61	154	405	559
62	149	339	488
63	106	293	399
64	120	255	375

Age	Male	Female	Total
65	99	203	302
66	85	130	215
67	52	107	159
68	34	81	115
69	41	87	128
70	33	60	93
71	11	26	37
72	2	10	12
73	1	9	10
74	3	3	6
75	3	5	8
76	2	3	5
77	4	0	4
78	0	2	2
79	2	0	2
80	0	3	3
81	1	0	1
82	1	1	2
83	2	1	3
84	1	2	3
85	1	0	1
86	0	0	0
87	0	0	0
88	1	1	2
89	0	0	0
90	0	1	1
91	0	0	0
92	0	0	0
93	0	0	0
94	0	0	0
95	0	0	0
96	0	0	0
97	0	0	0
98	0	0	0
99	0	1	1
Total	4,134	12,582	16,716

**State Teachers Retirement System of Ohio**

**TABLE 12  
THE NUMBER OF INACTIVE DEFINED BENEFIT MEMBERS  
ELIGIBLE FOR REFUNDS ONLY DISTRIBUTED BY  
AGE AS OF JULY 1, 2013**

Age	Male	Female	Total
Unknown	123	2,687	2,810
18	1	1	2
19	2	6	8
20	2	7	9
21	7	5	12
22	9	22	31
23	68	173	241
24	151	473	624
25	383	866	1,249
26	570	1,252	1,822
27	719	1,516	2,235
28	827	1,760	2,587
29	934	1,964	2,898
30	963	2,027	2,990
31	1,081	2,328	3,409
32	1,091	2,318	3,409
33	1,208	2,452	3,660
34	1,265	2,395	3,660
35	1,198	2,288	3,486
36	1,167	2,328	3,495
37	1,133	2,052	3,185
38	1,136	2,026	3,162
39	1,155	1,902	3,057
40	1,083	1,947	3,030
41	1,152	1,992	3,144
42	1,281	2,215	3,496
43	1,278	2,405	3,683
44	1,285	2,149	3,434
45	1,214	2,149	3,363
46	1,161	1,985	3,146
47	1,245	1,929	3,174
48	1,248	1,984	3,232

Age	Male	Female	Total
49	1,296	2,014	3,310
50	1,265	1,983	3,248
51	1,234	2,057	3,291
52	1,157	1,982	3,139
53	1,208	2,009	3,217
54	1,204	2,025	3,229
55	1,299	1,934	3,233
56	1,218	1,975	3,193
57	1,243	1,886	3,129
58	1,193	1,840	3,033
59	1,267	1,881	3,148
60	1,255	1,753	3,008
61	1,180	1,687	2,867
62	1,101	1,617	2,718
63	1,011	1,367	2,378
64	968	1,274	2,242
65	922	1,082	2,004
66	865	1,035	1,900
67	669	779	1,448
68	496	535	1,031
69	318	446	764
70	382	451	833
71	201	252	453
72	40	45	85
73	29	30	59
74	21	23	44
75	26	16	42
76	13	11	24
77	12	5	17
78	13	11	24
79	7	3	10
80	6	2	8

Age	Male	Female	Total
81	5	3	8
82	2	3	5
83	1	1	2
84	0	0	0
85	3	4	7
86	2	2	4
87	1	2	3
88	0	0	0
89	2	3	5
90	1	0	1
91	1	1	2
92	0	1	1
93	2	0	2
94	0	1	1
95	0	1	1
96	0	0	0
97	1	1	2
98	1	0	1
99	2	1	3
100	0	0	0
101	0	2	2
102	2	0	2
103	0	0	0
104	0	3	3
105	0	1	1
106	0	0	0
107	1	1	2
108	1	1	2
109	0	1	1
Total	49,287	85,646	134,933

State Teachers Retirement System of Ohio

**TABLE 13**  
**THE NUMBER AND ANNUAL RETIREMENT ALLOWANCES OF RETIREES**  
**AND BENEFICIARIES DISTRIBUTED BY AGE AS OF JULY 1, 2013**

**SUPERANNUATION RETIREES**

Age	Male		Female		Total	
	Number	Annuities	Number	Annuities	Number	Annuities
49	0	0	1	48,771	1	48,771
50	4	204,243	7	288,752	11	492,995
51	16	911,767	17	733,050	33	1,644,818
52	52	2,800,194	144	6,691,703	196	9,491,896
53	129	6,605,513	276	12,622,309	405	19,227,822
54	194	9,739,524	455	21,140,080	649	30,879,604
55	249	12,639,862	587	27,025,305	836	39,665,167
56	370	19,614,127	766	35,800,231	1,136	55,414,357
57	499	27,426,534	1,175	59,218,776	1,674	86,645,310
58	672	37,695,894	1,611	83,891,248	2,283	121,587,142
59	812	46,530,326	1,914	101,416,500	2,726	147,946,826
60	1,067	60,318,382	2,498	126,238,210	3,565	186,556,592
61	1,435	78,944,871	3,461	167,886,537	4,896	246,831,408
62	1,698	96,156,463	4,008	193,922,594	5,706	290,079,057
63	1,835	102,461,741	4,311	201,392,832	6,146	303,854,573
64	2,216	122,825,731	4,487	211,317,457	6,703	334,143,188
65	2,203	120,743,097	4,424	202,402,609	6,627	323,145,706
66	2,844	154,597,138	4,997	222,442,933	7,841	377,040,071
67	2,413	131,202,150	4,121	182,312,354	6,534	313,514,504
68	1,875	100,110,543	3,169	133,853,636	5,044	233,964,179
69	1,868	98,582,653	3,087	127,148,503	4,955	225,731,155
70	2,031	105,078,148	3,272	132,646,884	5,303	237,725,032
71	1,928	100,749,711	3,178	125,428,204	5,106	226,177,915
72	1,708	87,550,929	2,686	103,841,454	4,394	191,392,383
73	1,529	75,907,170	2,342	87,235,601	3,871	163,142,771
74	1,387	68,905,351	2,217	80,030,427	3,604	148,935,778
75	1,361	68,369,400	2,185	78,153,138	3,546	146,522,538
76	1,273	61,848,487	2,073	71,035,915	3,346	132,884,401
77	1,210	55,270,131	1,879	61,999,958	3,089	117,270,090
78	1,145	53,830,779	1,687	52,944,848	2,832	106,775,627
79	1,066	47,686,369	1,601	50,623,242	2,667	98,309,612

Age	Male		Female		Total	
	Number	Annuities	Number	Annuities	Number	Annuities
80	958	41,600,804	1,363	41,898,287	2,321	83,499,091
81	936	39,798,786	1,375	40,816,590	2,311	80,615,376
82	918	38,976,760	1,366	39,665,258	2,284	78,642,018
83	840	34,787,270	1,348	37,584,906	2,188	72,372,176
84	749	29,528,359	1,216	33,390,213	1,965	62,918,572
85	634	24,954,133	1,088	28,882,479	1,722	53,836,612
86	564	21,356,827	1,045	26,390,857	1,609	47,747,684
87	493	17,656,387	890	21,784,941	1,383	39,441,327
88	437	16,369,909	773	18,899,503	1,210	35,269,412
89	373	13,687,390	658	15,221,642	1,031	28,909,032
90	263	9,530,128	587	12,983,186	850	22,513,314
91	198	6,841,879	521	11,579,938	719	18,421,817
92	150	5,202,009	467	9,477,507	617	14,679,516
93	124	4,116,663	357	7,117,389	481	11,234,052
94	66	2,367,273	275	5,413,091	341	7,780,364
95	68	2,394,958	243	5,207,322	311	7,602,280
96	44	1,283,098	181	3,524,479	225	4,807,577
97	21	566,581	138	2,726,024	159	3,292,606
98	16	428,386	96	1,757,151	112	2,185,536
99	14	489,364	69	1,516,941	83	2,006,305
100	6	236,109	45	865,566	51	1,101,675
101	2	66,102	38	825,243	40	891,345
102	0	0	25	532,013	25	532,013
103	0	0	15	271,274	15	271,274
104	1	62,408	12	219,134	13	281,541
105	0	0	2	48,327	2	48,327
106	0	0	2	17,371	2	17,371
107	0	0	2	69,206	2	69,206
Total	44,964	\$2,267,608,812	82,833	\$3,330,419,898	127,797	\$5,598,028,710



State Teachers Retirement System of Ohio

**TABLE 14**  
**THE NUMBER AND ANNUAL RETIREMENT ALLOWANCES OF RETIREES**  
**AND BENEFICIARIES DISTRIBUTED BY AGE AS OF JULY 1, 2013**

**DISABILITY RETIREES**

Age	Male		Female		Total	
	Number	Annuities	Number	Annuities	Number	Annuities
32	0	0	1	17,162	1	17,162
33	0	0	2	51,306	2	51,306
34	1	16,707	4	81,362	5	98,070
35	0	0	2	40,816	2	40,816
36	2	47,882	7	159,525	9	207,407
37	0	0	5	115,426	5	115,426
38	2	47,590	7	151,488	9	199,078
39	2	56,943	13	331,625	15	388,567
40	2	38,933	7	169,091	9	208,024
41	2	52,682	11	261,498	13	314,180
42	3	56,938	15	371,250	18	428,188
43	5	175,578	18	481,693	23	657,270
44	5	115,448	20	634,232	25	749,680
45	1	23,564	25	745,224	26	768,788
46	5	145,097	28	976,630	33	1,121,727
47	7	218,076	30	1,193,911	37	1,411,988
48	11	464,483	36	1,421,290	47	1,885,773
49	13	559,919	50	1,947,828	63	2,507,747
50	18	604,834	38	1,435,920	56	2,040,754
51	21	916,539	42	1,660,540	63	2,577,079
52	22	925,788	75	2,903,988	97	3,829,776
53	16	700,651	65	2,455,256	81	3,155,907
54	22	932,280	61	2,361,486	83	3,293,766
55	20	934,064	72	2,904,043	92	3,838,107
56	35	1,453,435	80	3,153,763	115	4,607,198
57	29	1,282,947	109	3,776,805	138	5,059,751
58	47	1,989,052	124	4,788,560	171	6,777,611
59	40	1,565,462	126	4,685,190	166	6,250,652
60	58	2,182,357	157	5,589,478	215	7,771,835
61	83	3,435,441	190	6,938,503	273	10,373,945
62	75	3,243,821	174	6,383,448	249	9,627,268
63	85	3,542,541	197	7,321,726	282	10,864,267
64	79	3,636,471	213	7,757,654	292	11,394,126
65	106	4,389,806	180	6,722,117	286	11,111,922
66	104	4,551,253	164	6,333,936	268	10,885,188

Age	Male		Female		Total	
	Number	Annuities	Number	Annuities	Number	Annuities
67	86	3,677,852	155	5,355,017	241	9,032,869
68	88	4,073,823	130	4,704,821	218	8,778,644
69	76	3,112,252	128	4,687,027	204	7,799,279
70	72	2,802,795	110	3,935,190	182	6,737,985
71	74	2,904,462	117	4,053,549	191	6,958,011
72	52	2,017,494	94	3,213,311	146	5,230,805
73	50	2,147,653	82	2,718,554	132	4,866,207
74	48	1,993,409	85	2,759,591	133	4,752,999
75	43	1,485,742	76	2,354,228	119	3,839,970
76	34	1,264,586	83	2,392,056	117	3,656,641
77	52	1,882,296	60	1,691,649	112	3,573,945
78	40	1,497,551	68	1,984,224	108	3,481,775
79	39	1,269,163	51	1,383,704	90	2,652,867
80	34	1,172,928	39	1,117,954	73	2,290,881
81	33	1,269,039	38	1,013,255	71	2,282,294
82	28	970,424	38	928,129	66	1,898,553
83	24	797,450	48	1,132,366	72	1,929,816
84	14	499,537	38	816,186	52	1,315,722
85	25	769,364	32	695,578	57	1,464,942
86	16	437,047	40	909,589	56	1,346,636
87	10	320,069	22	491,926	32	811,994
88	15	532,253	21	410,577	36	942,830
89	5	117,424	21	397,282	26	514,706
90	4	138,451	13	264,409	17	402,860
91	4	140,877	13	225,385	17	366,262
92	4	54,985	19	416,160	23	471,145
93	3	94,675	9	163,650	12	258,325
94	1	12,766	6	137,694	7	150,461
95	2	61,065	5	128,480	7	189,545
96	0	0	1	12,438	1	12,438
97	1	32,557	0	0	1	32,557
98	0	0	1	24,316	1	24,316
99	1	38,007	0	0	1	38,007
Total	1,899	\$75,894,573	3,991	\$136,842,062	5,890	\$212,736,635

State Teachers Retirement System of Ohio

**TABLE 15**  
**THE NUMBER AND ANNUAL RETIREMENT ALLOWANCES OF RETIREES AND**  
**BENEFICIARIES DISTRIBUTED BY AGE AS OF JULY 1, 2013**

**CONTINGENT RETIREES**

Age	Male		Female		Total	
	Number	Annuities	Number	Annuities	Number	Annuities
15 or less	0	0	4	4,146	4	4,146
16	0	0	0	0	0	0
17	1	11,964	0	0	1	11,964
18	0	0	0	0	0	0
19	1	11,964	0	0	1	11,964
20	0	0	1	16,907	1	16,907
21	0	0	0	0	0	0
22	0	0	1	20,215	1	20,215
23	1	44,774	1	11,964	2	56,738
24	1	61,043	0	0	1	61,043
25	1	22,085	2	16,920	3	39,005
26	0	0	2	20,044	2	20,044
27	0	0	3	59,896	3	59,896
28	0	0	1	21,329	1	21,329
29	1	18,499	3	71,438	4	89,938
30	0	0	2	24,864	2	24,864
31	3	57,643	3	55,753	6	113,396
32	0	0	4	72,728	4	72,728
33	1	4,160	2	24,242	3	28,402
34	1	10,662	3	90,578	4	101,240
35	0	0	2	4,761	2	4,761
36	3	106,337	2	26,385	5	132,722
37	0	0	2	7,239	2	7,239
38	2	20,009	5	130,661	7	150,671
39	2	25,759	4	92,977	6	118,736
40	0	0	0	0	0	0
41	0	0	2	31,815	2	31,815
42	3	98,464	5	86,533	8	184,997
43	5	75,139	11	134,016	16	209,155
44	2	19,761	4	35,328	6	55,089
45	4	90,593	9	139,695	13	230,288
46	1	28,240	4	31,636	5	59,876
47	3	176,304	7	39,287	10	215,592
48	3	80,663	9	128,070	12	208,733
49	11	403,457	5	116,669	16	520,126
50	9	290,998	6	69,896	15	360,894
51	4	100,330	6	55,661	10	155,990
52	11	423,684	14	154,792	25	578,476
53	12	515,646	8	83,870	20	599,516
54	12	433,862	10	47,205	22	481,067
55	20	756,196	11	130,844	31	887,040
56	17	740,364	17	290,903	34	1,031,268
57	15	483,158	16	357,035	31	840,193
58	22	866,466	19	417,748	41	1,284,214
59	23	878,577	25	545,716	48	1,424,293
60	49	1,807,710	29	815,988	78	2,623,698
61	42	1,812,120	32	770,369	74	2,582,489

Age	Male		Female		Total	
	Number	Annuities	Number	Annuities	Number	Annuities
62	59	1,981,370	24	621,975	83	2,603,344
63	68	2,653,238	36	919,315	104	3,572,553
64	81	3,417,787	32	1,045,704	113	4,463,491
65	92	3,332,297	41	1,405,066	133	4,737,362
66	126	4,990,237	56	1,566,978	182	6,557,215
67	126	4,737,996	51	1,373,762	177	6,111,758
68	112	4,367,757	48	1,421,343	160	5,789,100
69	139	5,125,670	51	1,402,369	190	6,528,038
70	143	5,359,349	56	1,381,885	199	6,741,234
71	203	8,034,521	62	1,682,575	265	9,717,096
72	209	7,553,064	65	1,735,852	274	9,288,916
73	177	6,068,060	47	1,304,451	224	7,372,512
74	188	6,375,746	60	1,374,321	248	7,750,067
75	225	7,507,725	56	1,409,533	281	8,917,257
76	235	7,358,278	77	1,665,965	312	9,024,243
77	249	7,564,652	75	1,335,184	324	8,899,837
78	263	8,077,117	78	1,657,114	341	9,734,231
79	287	8,842,717	63	1,158,125	350	10,000,842
80	249	7,131,156	68	1,290,465	317	8,421,621
81	279	8,349,003	98	1,923,420	377	10,272,422
82	303	8,524,891	81	1,165,498	384	9,690,389
83	351	9,675,582	106	1,845,507	457	11,521,090
84	325	8,667,528	89	1,164,111	414	9,831,638
85	300	7,643,527	100	1,231,203	400	8,874,730
86	305	7,536,317	105	1,276,852	410	8,813,169
87	259	7,457,525	88	1,258,909	347	8,716,434
88	245	6,514,958	86	1,041,732	331	7,556,690
89	261	6,389,899	64	701,289	325	7,091,188
90	208	4,897,294	83	1,058,300	291	5,955,594
91	171	3,960,079	44	555,913	215	4,515,992
92	149	3,578,715	55	722,406	204	4,301,121
93	112	2,399,748	47	352,026	159	2,751,774
94	81	2,047,526	32	331,669	113	2,379,196
95	69	1,635,901	25	250,389	94	1,886,291
96	49	1,075,157	21	243,246	70	1,318,402
97	49	930,728	12	81,437	61	1,012,165
98	27	488,725	15	199,232	42	687,957
99	26	563,323	6	42,910	32	606,234
100	9	123,849	4	44,851	13	168,701
101	10	279,315	0	0	10	279,315
102	5	92,325	0	0	5	92,325
103	1	44,251	1	12,955	2	57,206
104	1	11,707	1	16,974	2	28,680
105	2	43,449	0	0	2	43,449
106	0	0	1	9,962	1	9,962
107	0	0	1	6,088	1	6,088
Total	7,114	\$213,886,691	2,507	\$46,544,985	9,621	\$260,431,676

State Teachers Retirement System of Ohio

**TABLE 16**  
**THE NUMBER AND ANNUAL RETIREMENT ALLOWANCES OF RETIREES AND**  
**BENEFICIARIES DISTRIBUTED BY AGE AS OF JULY 1, 2013**

**BENEFICIARIES RECEIVING ALLOWANCES**  
**UNDER SURVIVORS' BENEFIT FUND**

Age	Male		Female		Total	
	Number	Annuities	Number	Annuities	Number	Annuities
15 or less	178	1,624,946	135	1,011,612	313	2,636,559
16	20	204,197	25	195,811	45	400,009
17	31	365,133	37	305,258	68	670,391
18	23	177,075	32	338,538	55	515,614
19	45	600,650	38	362,976	83	963,626
20	37	354,175	22	177,413	59	531,588
21	29	388,300	31	361,369	60	749,670
22	9	129,388	8	30,393	17	159,781
23	2	33,511	0	0	2	33,511
24	1	11,571	1	2,289	2	13,860
25	1	53,704	3	36,336	4	90,040
26	3	17,925	0	0	3	17,925
27	2	29,042	0	0	2	29,042
28	0	0	0	0	0	0
29	2	26,178	1	6,264	3	32,443
30	1	9,005	3	24,659	4	33,664
31	3	37,431	0	0	3	37,431
32	5	56,051	0	0	5	56,051
33	2	32,257	2	18,002	4	50,258
34	0	0	3	39,163	3	39,163
35	2	24,513	2	22,180	4	46,693
36	4	65,334	2	23,657	6	88,991
37	4	59,799	7	82,883	11	142,682
38	5	58,317	3	39,535	8	97,852
39	2	26,624	7	89,513	9	116,137
40	8	138,088	7	87,426	15	225,514
41	5	80,017	3	47,010	8	127,027
42	10	232,233	11	138,285	21	370,517
43	7	93,841	7	94,237	14	188,079
44	10	151,194	8	89,537	18	240,730
45	12	195,556	11	159,279	23	354,835
46	11	187,449	13	178,646	24	366,094
47	14	329,685	14	152,478	28	482,163
48	8	135,270	19	255,863	27	391,133
49	14	324,484	11	142,087	25	466,571
50	20	360,938	16	275,073	36	636,010
51	22	514,844	27	444,674	49	959,518
52	22	439,619	16	251,949	38	691,567
53	21	379,004	21	353,963	42	732,967
54	23	517,765	27	412,566	50	930,331
55	29	702,590	32	582,408	61	1,284,999
56	28	765,726	32	694,800	60	1,460,526
57	30	745,163	29	577,608	59	1,322,771
58	41	951,540	49	984,819	90	1,936,359
59	47	1,343,611	55	1,251,624	102	2,595,236
60	70	2,004,556	64	1,450,087	134	3,454,644
61	64	1,720,654	70	1,697,423	134	3,418,077

Age	Male		Female		Total	
	Number	Annuities	Number	Annuities	Number	Annuities
62	77	2,299,535	70	1,518,726	147	3,818,262
63	76	2,092,773	91	1,896,856	167	3,989,629
64	92	2,503,548	80	2,081,739	172	4,585,287
65	81	2,046,946	73	1,665,181	154	3,712,127
66	105	2,921,647	103	2,368,235	208	5,289,881
67	102	2,700,281	89	2,001,637	191	4,701,918
68	88	2,248,841	77	1,391,501	165	3,640,342
69	101	2,387,011	60	1,188,936	161	3,575,947
70	95	2,573,073	77	1,665,441	172	4,238,514
71	87	2,408,199	85	1,828,973	172	4,237,172
72	85	2,310,723	66	1,171,963	151	3,482,686
73	63	1,827,559	64	1,372,823	127	3,200,382
74	61	1,382,223	54	907,410	115	2,289,633
75	88	2,176,277	75	1,278,816	163	3,455,093
76	95	2,163,357	64	1,107,653	159	3,271,011
77	82	1,831,608	53	985,456	135	2,817,064
78	77	1,862,056	56	992,997	133	2,855,053
79	89	2,059,084	58	1,019,356	147	3,078,440
80	59	1,191,966	42	861,241	101	2,053,207
81	72	1,198,300	41	695,325	113	1,893,625
82	60	1,294,464	62	948,533	122	2,242,997
83	69	1,337,344	34	495,233	103	1,832,577
84	72	1,779,082	46	767,024	118	2,546,106
85	69	1,340,718	42	542,670	111	1,883,388
86	63	1,408,644	39	665,539	102	2,074,182
87	62	1,064,709	34	432,371	96	1,497,080
88	47	837,832	34	517,584	81	1,355,416
89	28	538,258	33	470,029	61	1,008,288
90	30	601,637	17	247,078	47	848,715
91	30	544,722	21	384,223	51	928,945
92	22	568,807	15	223,409	37	792,216
93	20	340,289	10	136,317	30	476,606
94	9	129,557	8	97,897	17	227,454
95	12	230,017	3	35,286	15	265,302
96	4	75,764	3	44,318	7	120,082
97	8	159,664	3	49,646	11	209,310
98	5	95,721	3	38,958	8	134,678
99	4	78,485	3	44,226	7	122,711
100	1	21,327	1	5,856	2	27,183
101	0	0	0	0	0	0
102	0	0	2	13,777	2	13,777
103	0	0	0	0	0	0
104	0	0	0	0	0	0
105	1	4,206	0	0	1	4,206
Total	3,218	\$71,335,206	2,695	\$47,649,931	5,913	\$118,985,137