

State Teachers Retirement System of Ohio

Actuarial Valuation and Review as of July 1, 2013
Revised January 2014



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January 23, 2014

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 27% 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 40.2 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

Bv

Kim Nicholl, FSA, MAAA, EA Senior Vice President and Actuary

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Consulting Actuary

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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 40.2 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.



Summary of Key Valuation Results (\$ in thousands)

	-	2013		
	Defined Benefit	Combined	Total	2012 ¹ Total
Membership Data	Definied Benefit	Combined	Total	1014
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	149,138	83	149,221	143,256
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
	\$9,590,900	\$231,329	\$9,042,289	\$9,302,883
Membership Payroll a. STRS Defined Benefit Plan Members	¢0.691.1 25	\$226.706	¢0 017 011	10 102 500
b. STRS Defined Contribution Plan Members	\$9,681,125 279,054	\$236,786	\$9,917,911 279,054	10,102,509 256,812
c. Alternative Retirement Plan Members	568,670	-	568,670	230,812 519,754
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
Valuation Results	\$0,107,547	\$655	\$0,170,102	\$5,015,407
5. Actuarial Accrued Liability				
a. Active Members	\$23,735,393	\$130,573	\$23,865,966	\$35,790,377
b. Reemployed Retirees	384,253	\$150,575	384,253	394,325
c. Inactive Members	1,350,299	4,207	1,354,506	1,438,262
d. Retirees and Beneficiaries	1,550,277	7,207	1,554,500	1,430,202
(i) Annuity and Pension Reserve Fund	66,950,757	6,967	66,957,724	66,970,288
(ii) Survivors' Benefit Fund	1,117,716	-	1,117,716	1,140,887
(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	686,528	-	686,528	567,702
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		
	Defined Benefit	Combined	Total	Total
Valuation Results				
8. Total Actuarial Accrued Liability	\$92,224,946	\$141,748	\$94,366,694	\$106,301,841
9. Actuarial Value of Pension Assets			62,590,786	59,489,508
10. Unfunded Actuarial Accrued Liability			\$31,775,907	\$46,812,333
11. Funding Period ²			40.2 years	Infinit
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
Allocation of Employer Contribution Rate				
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>	7.069
c) Total Pension	13.00%	13.00%	13.00%	13.00%
d) Health Care	<u>1.00%</u>	<u>1.00%</u>	1.00%	1.000
e) Total	14.00%	14.00%	14.00%	14.00

Note: numbers may not add due to rounding.

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



¹ 2012 results are based on the valuation performed by PricewaterhouseCoopers LLP.

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

Year Ended June 30	Active Members*	Reemployed Retirees	Inactive Members Eligible for Allowances	Inactive Members Eligible for Refunds Only	Retirees and Beneficiaries	Ratio of Actives to Retirees and Beneficiaries
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.



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

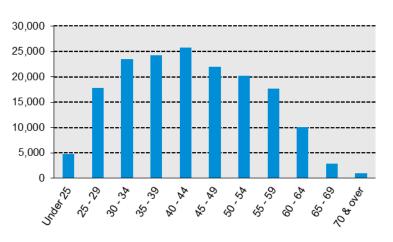
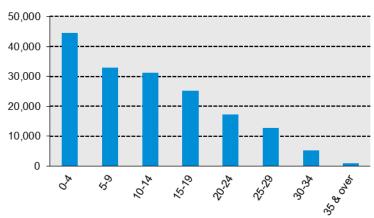


CHART 3
Distribution of Active Participants by Years of Service as of June 30, 2013*



^{*} Excludes defined contribution only members.



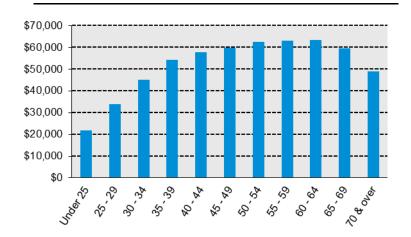
Distribution of Active Members by Age and Average Compensation*

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.



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.

■ Survivor's Benefit Fund Beneficiary

■Disabled Retiree

■Re tiree

■Beneficiary Receiving Optional Allowance

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

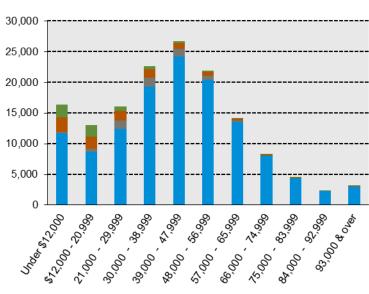
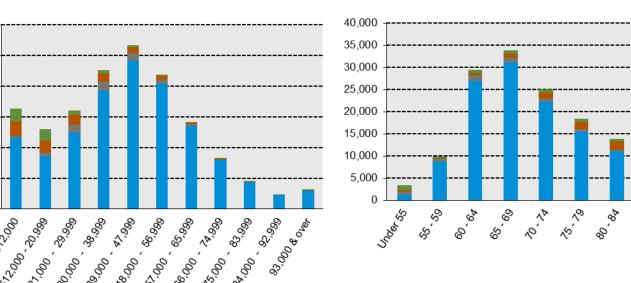


CHART 6 Distribution of Retirees and Beneficiaries by Type and Age as of June 30, 2013



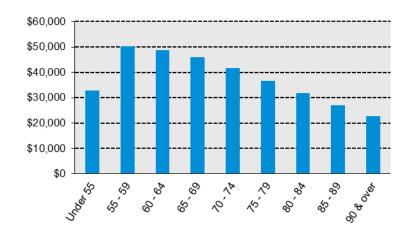


Distribution of Retirees and Beneficiaries by Age and Average Monthly Benefit Amount

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





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.

2012

2012

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)

			20)13	2	2012
1.	Market value of Defined Benefit and Combined	d Plan assets		\$64,705,982		\$60,693,621
			% Not		% Not	
2.	Calculation of unrecognized return*	Original Amount**	Recognized		Recognized	
	(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 P	lan assets		61,904,022		58,919,549
6.	Defined Contribution Plan assets			686,528		567,702
7.	Early Retirement Incentive receivable			<u>236</u>		2,257
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

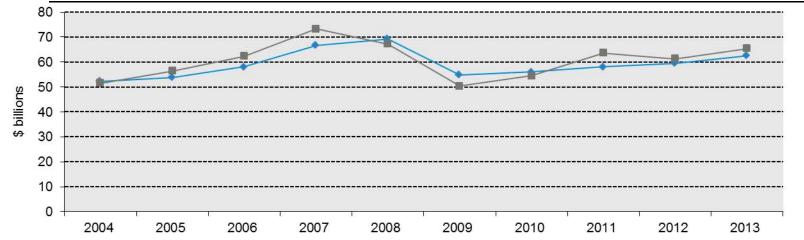
^{**}Actual market return minus expected return on actuarial value of assets



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





Actuarial Value

----- Market Value

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: $(1) \div (2)$	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>



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 fiveyear, ten-year, fifteen-year and twenty-year averages.

CHART 11 Investment Return

Year Ended June 30	Market Value	Actuarial Value
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.

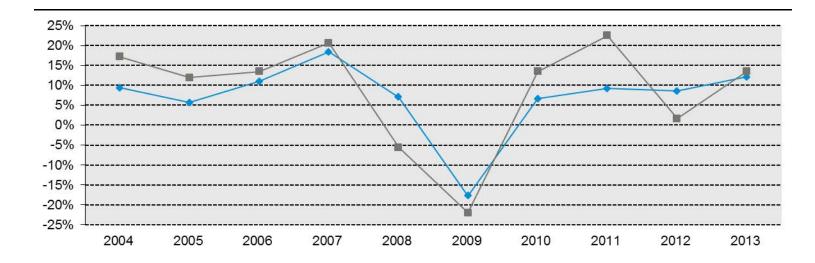


The actuarial asset valuation method gradually takes into account fluctuations in the market value rate of return. The effect of this is to stabilize the actuarial rate of return, which contributes to leveling pension plan costs.

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



---- Actuarial Value



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)

		Ι	Disbursements or Expenditures					
Year Ending June 30,	Contributions ¹	Benefit Payments	Refunds	Administrative Expenses	Total Disbursement	Net Cash Flow for the Year ²	Market Value of Assets	Net Cash Flow as Percent of Market Value
(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%

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



² Column (7) = Column (2) + Column (6).

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)

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



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 15.45% 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>14.42</u>	<u>24.66</u>	
5. Annual Required Contribution: (3) + (4)	15.45%	30.60%	
6. Employer Contribution	13.00	13.00	
7. Contribution Sufficiency/(Deficiency): (6) - (5)	(2.45%)	(17.60%)	



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)

Fiscal Year Ended June 30	Net Gain or (Loss)
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)



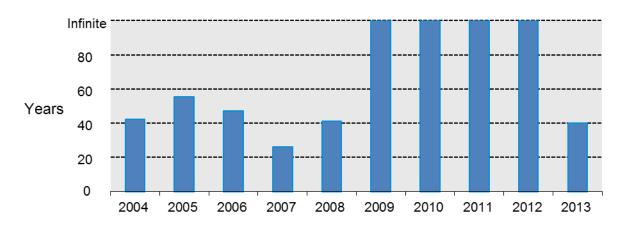
Funding Period

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:

		Contribu	ution Rate	
Valuation as of July 1	Funding Period Years	Member	Employer	
2013	40.2	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





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

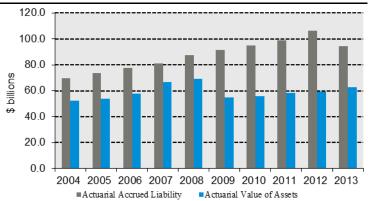
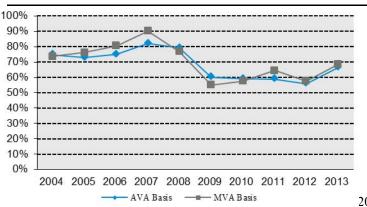


CHART 19 **Funded Ratio, Years Ended June 30**





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.



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.

Active Statistics					
	July 1, 2013				
Plan Eligibility*					
a. Grandfathered	28,766				
b. Non-grandfathered	141,179				
c. Total	169,945				
Benefit Eligibility					
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.



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

	Male	Female	Total
1. Defined Benefit Plan Active Members			
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
2. Combined Plan Active Members			
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
3. Total Defined Benefit and Combined Plan Active Members			
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
4. Defined Benefit Inactive Members			
Eligible for Allowances	4,134	12,582	16,716
Eligible for Refunds Only	49,287	85,646	134,933
Total	53,421	98,228	151,649
5. Combined Benefit Inactive Members			
Eligible for Allowances	67	298	365
Eligible for Refunds Only	<u>296</u>	<u>876</u>	1,172
Total	363	1,174	1,537
6. Total Inactive Members			
Eligible for Allowances	4,201	12,880	17,081
Eligible for Refunds Only	49,583	86,522	136,105
Total	53,784	99,402	153,186



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

	Male	Female	Total
7. Retirees			
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
8. Disabled Retirees			
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
9. Beneficiaries Receiving Optional Allowances			
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
10. Survivor's Benefit Fund Beneficiaries			
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
11. Total Retirees and Beneficiaries			
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



EXHIBIT B-1
Active Membership Data as of July 1, 2013 – Number and Average Annual Salary

Defined Benefit and Combined Plans

•	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	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		



EXHIBIT B-2
Active Membership Data as of July 1, 2013 – Number and Average Annual Salary

Defined Benefit 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	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		



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							



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

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



EXHIBIT C-2
Retiree And Beneficiary Membership Data as of July 1, 2013 Number And Annual Retirement Allowance

Age Last Birthday	Number	Ann	nual Allowance	Average Annual Allowance	
Retired Annuitants					
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	20,937		640,474,486		30,591
Total	127,797	\$	5,598,028,710	\$	43,804
Beneficiaries Receiving Optional Allowances	*				•
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	4,923		112,796,599		22,912
Total	9,621	\$	260,431,676	\$	27,069
Survivors' Benefit Fund Beneficiaries	,		, ,		,
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	1,194		21,609,408		18,098
Total	5,913	\$	118,985,137	\$	20,123
Disability Retirees	*				•
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	591		15,567,544		26,341
Total	5,890	\$	212,736,635	\$	36,118
Grand Total	149,221	\$	6,190,182,158	\$	41,483



EXHIBIT D 10-Year History of Membership Data

Active Members					
Valuation as of July 1	Number of Active Members	Percentage Change in Membership	Total Annual Payroll (for Period Ending June 30 th)	Average Annual Pay	Percentage Increase in Average Pay
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%

Retirees and Beneficiaries

Valuation as of July 1	Number	Percentage Change in Number of Recipients	Annual Allowances	Percentage Change in Allowances	Average Annual Annuity
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



EXHIBIT E

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

Fiscal Year	Projected Annual Benefits During the Year
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



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

	Active Members	Reemployed Retirees	Inactive Members Eligible for Allowances	Inactive Members Eligible for Refunds Only	Retirees	Beneficiaries	Total
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>	2,708
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



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	33,305	<u>-</u> _	33,305
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	(182,864)	(299)	(183,163)
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	\$6,397,406	\$20,870	\$6,418,277
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



EXHIBIT H

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

			Year Ending June 30		
			2013	20	12
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	93,988		100,459	
	(c) Total interest: (4a) – (4b)		3,649,759		3,265,636
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	390,642		128,088	
	(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		0		4,178,741
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.



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



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



Actuarially Determined:

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.

Amortization Method:

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.

Amortization Payment:

The portion of the pension plan contribution, or ARC, that is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability.

Annual Required Contribution (ARC):

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.

Assumptions or Actuarial Assumptions:

The estimates on which the cost of the System is calculated including:

- (a) <u>Investment return</u> the rate of investment yield that the System will earn over the long-term future;
- (b) <u>Mortality rates</u> the death rates of employees and pensioners; life expectancy is based on these rates;
- (c) <u>Retirement rates</u> the rate or probability of retirement at a given age;
- (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;
- (e) <u>Salary increase rates</u> the rates of salary increase due to inflation and productivity growth



Closed Amortization Period: 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.

Decrements: Those causes/events due to which a member's status (active-inactive-retiree-

beneficiary) changes, that is: death, retirement, disability, or termination.

Defined Benefit Plan: A retirement plan in which benefits are defined by a formula applied to the member's

compensation and/or years of service.

Defined Contribution Plan: 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.

Employer Normal Cost: The portion of the Normal Cost to be paid by the employers. This is equal to the

Normal Cost less expected member contributions.

Experience Study: 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.

Funded Ratio: 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.

Funding Period or Amortization

Period:

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.



GASB: Governmental Accounting Standards Board.

GASB 25 and GASB 27: 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.

GASB 67 and GASB 68: Governmental Accounting Standards Board Statements No. 67 and No. 68 are the

successor statements to GASB Statements No. 25 and No. 27.

Investment Return: 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.

Margin: The difference, whether positive or negative, between the statutory employer

contribution rate and the Annual Required Contribution (ARC) as defined by

GASB 25.

Normal Cost: 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.



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.

EXHIBIT I
Schedule of Employer Contribution (GASB) (\$ in thousands)

Fiscal Year ended June 30	Annual Required Contribution	Percentage Contributed
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).

EXHIBIT II
Schedule of Funding Progress (GASB) (\$ in thousands)

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Valuation Date		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

	Actu	Actuarial Accrued Liability for:			Portion of Actuarial Accrued Liability Covered by Valuation Assets		
Valuation as of July 1	(1) Active Member Contributions	(2) Retirees and Beneficiaries	(3) Active Member (Employer Financed Portion)	Valuation Assets	(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.



EXHIBIT IV

Supplementary Information Required by the GASB

Valuation date	July 1, 2013
Actuarial cost method	Entry Age Normal cost method
Amortization method	Level percent of payroll
Amortization period	30-year open period
Asset valuation method	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.
Actuarial assumptions:	
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:
	 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 date.



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.)

Age	Male	Female
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%



Salary Increase Rates:

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

Age	Rate
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.

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.

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 B	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 1	efined 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%			



Retirement Rates (continued):

Defined Benefit Plan – Grandfathered Members						
		Male Ra	tes			
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%		

Def	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%	



Retirement Rates (continued):

	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%

	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)



Retirement Rates (continued):

	Combined Plan		
Age	Male	Female	
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.)

Age	Male	Female
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%



Termination Rates:

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

Vested Terminations*			
Age	Male	Female	
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

Non-Vested Terminations			
Service	Male	Female	
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.

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:

Unreduced Benefit for Retirement Between:	Minimum Age and Years of Service
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



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:

Year	Percentage
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.



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:

Attained Age	or	Years of Ohio Service Credit	% of Base Amount
58		25	75%
59		26	80
60		27	85
61			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:

Actuarially Reduced Benefit for Retirement Between:	Minimum Age and Years of Service	
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		

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



Disability Retirement

Eligibility

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.

Amount

- 1) Annuity with a reserve equal to the member's accumulated contributions, plus
- 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.

Disability Allowance

Eligibility

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.

Amount

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.



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 $1\frac{1}{2}$ years of credit for Ohio service with at least 1/4 year of such service in the $2\frac{1}{2}$ 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:

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

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:

Years of Service	% of Final Average Salary
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.

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:

Credit Service Lump Sum

Less than 3 Years Member Contributions

with 2% Interest

3 or More Years and Less Member Contributions

than 5 Years 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



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.



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

July 1, 2016.

By Employers 14% of salaries of their employees who are members.



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.



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 $2\frac{1}{2}$ 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.



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.



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.



DEFINED CONTRIBUTION PLAN

Eligibility for Membership New members hired on or after July 1, 2001, may elect in writing to participate in

the Defined Contribution Plan.

Service (Normal) Retirement

Eligibility Termination after age 50.

Amount The balance in the member's defined contribution account.

Vesting

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.

Amount The balance in the member's defined contribution account.

Early Retirement

Eligibility Termination before age 50.

Amount The balance in the member's defined contribution account

Disability Allowance

Eligibility Permanently incapacitated for the performance of duty and termination of

employment.

Amount The balance in the member's defined contribution account. At age 50, other payment

options are available, but employment must first be terminated.

Survivor's Benefit

Eligibility Upon death.

Amount 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.



DEFINED CONTRIBUTION PLAN (continued)

Optional Forms of Payment 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.

Cost-of-Living Benefits Not available

Health Care Not available.

Contribution

By Members 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.

By Employers 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.



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.

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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

		Male		Female		Total			Male	ı	- emale		Total
Age	Number	Compensation*	Number	Compensation*	Number	Compensation*	Age	Number	Compensation*	Number	Compensation*	Number	Compensation*
18	0	0	2	52,337	2	52,337	56	1,071	75,137,831	2,942	181,336,668	4,013	256,474,500
19	3	24,256	1	8,458	4	32,714	57	1,012	72,070,351	2,622	157,365,356	3,634	229,435,707
20	4	32,094	3	28,100	7	60,194	58	934	66,263,090	2,433	145,773,614	3,367	212,036,704
21	9	53,388	14	98,254	23	151,643	59	895	59,699,004	2,351	144,812,840	3,246	204,511,844
22	21	256,699	126	1,585,936	147	1,842,635	60	812	55,795,544	1,949	120,437,135	2,761	176,232,679
23	249	4,168,572	964	19,099,743	1,213	23,268,315	61	755	52,194,973	1,764	108,166,209	2,519	160,361,181
24	548	11,192,911	1,679	38,480,525	2,227	49,673,436	62	688	46,407,581	1,524	93,038,565	2,212	139,446,146
25	733	17,132,758	1,991	52,752,781	2,724	69,885,539	63	593	38,828,183	1,249	76,070,928	1,842	114,899,111
26	783	20,810,163	2,295	68,685,251	3,078	89,495,414	64	538	37,032,168	1,051	63,805,551	1,589	100,837,719
27	849	25,828,335	2,476	82,537,479	3,325	108,365,814	65	457	31,701,571	749	43,692,521	1,206	75,394,093
28	1,047	35,417,991	2,811	99,877,420	3,858	135,295,411	66	405	29,506,432	527	29,717,785	932	59,224,217
29	1,032	37,416,678	2,933	111,888,024	3,965	149,304,701	67	285	17,345,051	339	17,710,137	624	35,055,187
30	1,175	45,387,286	2,992	119,025,991	4,167	164,413,277	68	191	11,928,125	219	11,459,123	410	23,387,248
31	1,269	52,268,501	3,316	139,054,685	4,585	191,323,187	69	164	10,144,169	165	7,914,852	329	18,059,021
32	1,264	56,225,385	3,344	144,614,843	4,608	200,840,229	70	130	8,385,973	113	5,675,668	243	14,061,641
33	1,280	59,089,591	3,430	156,326,047	4,710	215,415,638	71	127	5,907,574	84	3,570,397	211	9,477,971
34	1,367	69,627,163	3,561	170,032,535	4,928	239,659,697	72	86	6,041,926	60	2,285,326	146	8,327,251
35	1,436	75,103,500	3,556	175,819,981	4,992	250,923,482	73	64	2,749,612	46	2,048,811	110	4,798,423
36	1,452	80,254,886	3,634	186,634,068	5,086	266,888,954	74	56	2,928,265	33	1,837,110	89	4,765,375
37	1,447	83,345,807	3,237	170,093,699	4,684	253,439,505	75	51	2,584,646	22	328,190	73	2,912,836
38	1,382	81,305,057	3,326	175,966,701	4,708	257,271,758	76	41	2,743,610	17	595,813	58	3,339,423
39	1,482	86,524,051	3,435	187,526,954	4,917	274,051,005	77	26	1,582,493	15	527,196	41	2,109,689
40	1,381	83,755,319	3,342	182,378,770	4,723	266,134,088	78	27	1,340,451	11	286,385	38	1,626,836
41	1,413	86,509,472	3,431	189,222,174	4,844	275,731,646	79	15	528,754	9	156,660	24	685,413
42	1,480	91,900,268	3,902	217,289,911	5,382	309,190,179	80	10	511,522	8	232,227	18	743,749
43	1,533	97,672,728	3,961	220,524,767	5,494	318,197,496	81	11	299,137	5	269,600	16	568,737
44	1,448	93,441,708	3,671	209,781,748	5,119	303,223,456	82	9	364,418	5	241,287	14	605,706
45	1,377	88,301,011	3,558	197,570,948	4,935	285,871,960	83	1	4,423	1	7,200	2	11,623
46	1,299	83,320,341	3,406	191,259,978	4,705	274,580,319	84	5	236,923	2	17,574	7	254,497
47	1,264	83,950,357	3,146	, ,	4,410	266,342,314	85	3	182,420	0	0	3	182,420
48	1,267	82,994,171	2,933	172,502,856	4,200	255,497,028	86	2	124,367	0	0	2	124,367
49	1,201	78,846,202	2,977	173,095,841	4,178	251,942,044	87	2	32,409	0	0	2	32,409
50	1,187	81,598,795	3,051	181,746,086	4,238	263,344,881	88	1	5,400	0	0	1	5,400
51	1,234	83,016,685	3,118	186,985,458	4,352	270,002,143	89	1	3,150	0	0	1	3,150
52	1,185	83,268,504	3,006	180,291,287	4,191	263,559,790	90	0	0	0	0	0	0
53	1,099	76,301,435	2,778	164,232,122	3,877	240,533,556	91	0	0	0	0	0	0
54	1,051	71,270,293	2,748	162,583,645	3,799	233,853,937	92	1	118,630	0	0	1	118,630
55	1,047	73,132,293	2,709	165,132,562	3,756	238,264,855	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

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		Male		Female		Total
Service	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		Male		Female		Total
Service	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

		Male		Female		Total
Age	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

		Male	F	emale		Total
Age	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

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

Years of		Male		Female		Total
Service	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

		Male		Female		Total			Male		Female		Total
Age	Number	Compensation*	Number	Compensation*	Number	Compensation*	Age	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

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		Male		Female		Total
Service	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		Male		Female		Total
Service	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

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

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	1,270	2,083	3,209
52	1,170	2,003	3,327
53	1,170	2,001	3,171
54	1,217	2,032	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



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

Age	le 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

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			35
37	8	27	35
38	3	18	21
39			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	-		33
48	-		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

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



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	2 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



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

SUPERANNUATION RETIREES

	Male		Female		Total	
Age	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

		Male		emale	Total			
Age	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	467 9,477,507		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		



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

DISABILITY RETIREES

		Male	F	emale	Total		
Age	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	

		Male	F	emale	Total		
Age	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	



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

CONTINGENT RETIREES

	ı	Male	F	emale		Total		ı	Male	Fe	male	Т	otal
Age	Number	Annuities	Number	Annuities	Number	Annuities	Age	Number	Annuities	Number	Annuities	Number	Annuities
15 or less	0	0	4	4,146	4	4,146	62	59	1,981,370	24	621,975	83	2,603,344
16	0	0	0	0	0	0	63	68	2,653,238	36	919,315	104	3,572,553
17	1	11,964	0	0	1	11,964	64	81	3,417,787	32	1,045,704	113	4,463,491
18	0	0	0	0	0	0	65	92	3,332,297	41	1,405,066	133	4,737,362
19	1	11,964	0	0	1	11,964	66	126	4,990,237	56	1,566,978	182	6,557,215
20	0	0	1	16,907	1	16,907	67	126	4,737,996	51	1,373,762	177	6,111,758
21	0	0	0	0	0	0	68	112	4,367,757	48	1,421,343	160	5,789,100
22	0	0	1	20,215	1	20,215	69	139	5,125,670	51	1,402,369	190	6,528,038
23	1	44,774	1	11,964	2	56,738	70	143	5,359,349	56	1,381,885	199	6,741,234
24	1	61,043	0	0	1	61,043	71	203	8,034,521	62	1,682,575	265	9,717,096
25	1	22,085	2	16,920	3	39,005	72	209	7,553,064	65	1,735,852	274	9,288,916
26	0	0	2	20,044	2	20,044	73	177	6,068,060	47	1,304,451	224	7,372,512
27	0	0	3	59,896	3	59,896	74	188	6,375,746	60	1,374,321	248	7,750,067
28	0	0	1	21,329	1	21,329	75	225	7,507,725	56	1,409,533	281	8,917,257
29	1	18,499	3	71,438	4	89,938	76	235	7,358,278	77	1,665,965	312	9,024,243
30	0	0	2	24,864	2	24,864	77	249	7,564,652	75	1,335,184	324	8,899,837
31	3	57,643	3	55,753	6	113,396	78	263	8,077,117	78	1,657,114	341	9,734,231
32	0	0	4	72,728	4	72,728	79	287	8,842,717	63	1,158,125	350	10,000,842
33	1	4,160	2	24,242	3	28,402	80	249	7,131,156	68	1,290,465	317	8,421,621
34	1	10,662	3	90,578	4	101,240	81	279	8,349,003	98	1,923,420	377	10,272,422
35	0	0	2	4,761	2	4,761	82	303	8,524,891	81	1,165,498	384	9,690,389
36	3	106,337	2	26,385	5	132,722	83	351	9,675,582	106	1,845,507	457	11,521,090
37	0	0	2	7,239	2	7,239	84	325	8,667,528	89	1,164,111	414	9,831,638
38	2	20,009	5	130,661	7	150,671	85	300	7,643,527	100	1,231,203	400	8,874,730
39	2	25,759	4	92,977	6	118,736	86	305	7,536,317	105	1,276,852	410	8,813,169
40	0	0	0	0	0	0	87	259	7,457,525	88	1,258,909	347	8,716,434
41	0	0	2	31,815	2	31,815	88	245	6,514,958	86	1,041,732	331	7,556,690
42	3 5	98,464	5	86,533	8	184,997	89	261	6,389,899	64	701,289	325	7,091,188
43	- I	75,139	11	134,016	16	209,155	90	208	4,897,294	83	1,058,300	291	5,955,594
44 45	2	19,761	4	35,328	6	55,089	91	171	3,960,079	44	555,913	215	4,515,992
-	4	90,593	9	139,695	13	230,288	92	149	3,578,715	55 47	722,406	204	4,301,121
46 47	3	28,240	4	31,636	5 10	59,876	93 94	112	2,399,748		352,026	159	2,751,774
48	3	176,304 80,663	9	39,287 128,070	10	215,592 208,733	95	81 69	2,047,526 1,635,901	32 25	331,669 250,389	113 94	2,379,196 1,886,291
49	11	403,457	5	116,669	16	520,126	96	49	1,035,901	23	243,246	70	1,318,402
50	9	290,998	6	69,896	15	360,894	97	49	930,728	12	81,437	61	1,012,165
51	4	100,330	6	55,661	10	155,990	98	27	488,725	15	199,232	42	687,957
52	11	423,684	14	154,792	25	578,476	99	26	563,323	6		32	606,234
53	12	515,646	8	83,870	20	599,516	100	9	123,849	4	44,851	13	168,701
54	12	433,862	10	47,205	22	481,067	100	10	279,315	0		10	279,315
55	20	756,196	11	130,844	31	887,040	102	5	92,325	0	0	5	92,325
56	17	740,364	17	290,903	34	1,031,268	103	1	44,251	1	12,955	2	57,206
57	15	483,158	16	357,035	31	840,193	103	'	11,707	,	16,974	2	28,680
58	22	866,466	19	417,748	41	1,284,214	105	2	43,449	0	0	2	43,449
59	23	878,577	25	545,716	48	1,424,293	106	0	0	1	9,962	1	9,962
60							107	0	0	1		1	6,088
61	l I			·	74			7,114	\$213,886,691	2,507		9,621	\$260,431,676
60	49 42	1,807,710 1,812,120	25 29 32	545,716 815,988 770,369	78	1,424,293 2,623,698 2,582,489		0 0 7,114	-	1 1 2,507	9,962 6,088 \$46,544,985	1 1 9,621	6,

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

	Male			emale	Total		
Age	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	

		Male	Fr	emale	Total		
Age	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 95	9	129,557 230,017	8	97,897 35,286	17 15	227,454	
96	4		3		7	265,302	
96	8	75,764 159,664	3	44,318 49,646	11	120,082 209,310	
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	
100	0	0	0	5,000	0	27,103	
101	0	0	2	13,777	2	13,777	
102	0	0	0	0	0	0	
103	0	0	0	0	0	0	
104	1	4,206	0	0	1	4,206	
Total	3,218	\$71,335,206	2,695	\$47,649,931	5,913	\$118,985,137	
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