GRS Gabriel Roeder Smith & Company
Consultants & Actuaries

ARKANSAS TEACHER RETIREMENT SYSTEM

ANNUAL ACTUARIAL VALUATION OF ACTIVE AND INACTIVE MEMBERS

JUNE 30, 2011

REPORT OF THE JUNE 30, 2011 ACTUARIAL VALUATION
OUTLINE OF CONTENTS

GRS Gabriel Roeder Smith & Company
Consultants & Actuaries
One Towne Square
Suite 800
Southfield, MI 48076-3723
248.799.9000 phone
248.799.9020 fax
www.gabrielroeder.com

December 16, 2011

Board of Trustees
Arkansas Teacher Retirement System
Little Rock, Arkansas

Ladies and Gentlemen:

Presented in this report are the results of the ***Annual Actuarial Valuation of non-retired members as of June 30, 2011.*** The June 30th annual valuation of retired lives receiving monthly benefits indicates the liabilities for future benefit payments to existing retirees. These liabilities are covered in a separate report.

The valuation was based upon census data and financial information provided by the System's administrative staff. Preparation of this data requires considerable staff time. The helpful cooperation of the Arkansas Teacher Retirement System staff in furnishing the data is acknowledged with appreciation.

Data was checked for internal and year-to-year consistency, but was not otherwise audited. The actuarial assumptions used for valuation purposes are summarized in Section G. These assumptions reflect experience during the period July 1, 2005 to June 30, 2010.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements; and changes in plan provisions or applicable law. This report does not contain an analysis of the potential range of such future measurements.

To the best of our knowledge, this report is complete and accurate and was made in accordance with standards of practice promulgated by the Actuarial Standards Board of the American Academy of Actuaries. The actuarial assumptions used for the valuation produce results which, individually and in the aggregate, are reasonable.

This report has been prepared by actuaries who have substantial experience valuing public employee retirement systems. The signing actuaries are Members of the American Academy of Actuaries (MAAA) and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Respectfully submitted,

Brian B. Murphy

Brian B. Murphy, FSA, EA, MAAA, FCA

Judith A. Kermans

Judith A. Kermans, EA, MAAA, FCA

BBM/JAK:bd

SECTION A

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

General Financial Objective. Section 24-3-103 of the Arkansas Code provides as follows (emphasis added):

> "6.01. (1) The general financial objective of each Arkansas public employee retirement plan shall be to ***establish and receive contributions which, expressed as percents of active member payroll, will remain approximately level from generation to generation of Arkansas citizens***. More specifically, contributions received each year shall be sufficient both to (i) fully cover the costs of benefit commitments being made to members for their service being rendered in such year and (ii) make a level payment which if paid annually over a reasonable period of future years will fully cover the unfunded costs of benefit commitments for service previously rendered....."

Arkansas Teacher Retirement System Status: Based upon the results of June 30, 2011 actuarial valuations, ***ATRS is satisfying the financial objective of level-contribution-percent financing.***

This report contains the results of the June 30, 2011 valuation. The table below shows a summary of the data used in the valuation. This data was the basis for determining valuation results and recommended employer contribution rates.

	Number	Average	Type of Average
Active not in TDROP	72,293	$33,995	Pay
Active in TDROP	4,487	60,323	Pay
Deferred Vested	12,439	4,613	Annual Projected Benefit
Retired	32,099	20,470	Annual Current Benefit
Total Members	**121,318**		

Also included in the 2011 valuation were 4,093 reemployed retirees with total earnings of $89.9 million. ATRS receives 14% employer contributions on these individuals per State Code Section 24-7-708.

The June 30, 2011 valuation results are used to determine the contribution rate for Fiscal Year 2013.

Employer Contribution Rates for Fiscal Years
Ending June 30, 2013 and 2012 (Prior Year)

	Percents of Active Member Full Payroll			
Computed Contributions for	**Teachers**	**Support**	**Combined**	**Prior Year**
Normal Cost	12.18%	10.66%	**11.70%**	12.89%
Average Member Contributions	5.09%	3.92%	**4.72%**	4.68%
Net Employer Normal Cost	7.09%	6.74%	**6.98%**	8.21%
Unfunded Actuarial Accrued Liabilities			**7.02%**	5.79%
Employer Contribution Rate			**14.00%**	14.00%
Amortization Years			**66.0**	52.4
Funded Ratio			**71.8%**	73.8%

The amortization period this year is 66 years, an increase from last year's 52-year period. The increase occurred primarily due to recognition of prior investment losses since the annual market rate of return was 22.61%[#] compared to an assumed rate of 8.0%. Investment gains and losses that occur each year are smoothed in over a 4-year period. Although there were carryover gains from prior years and a new gain this year that were recognized, the losses in prior years more than offset those gains. As of June 30, 2011, the market value of assets exceeds the actuarial value of assets by $0.7 billion. Unless there is a substantial investment gain in FY 2012, the amortization period is likely to increase significantly next year.

The ATRS Board has enacted substantial legislation in 2011 to reduce costs. A few of the legislative changes produced immediate results and impacted the amortization period in the June 30, 2011 valuation, specifically:

- Act 69 – All service purchases will be at full actuarial cost.
- Act 977 – Members with 15 or more years of contributory service will receive the full $10,000 lump sum death benefit.

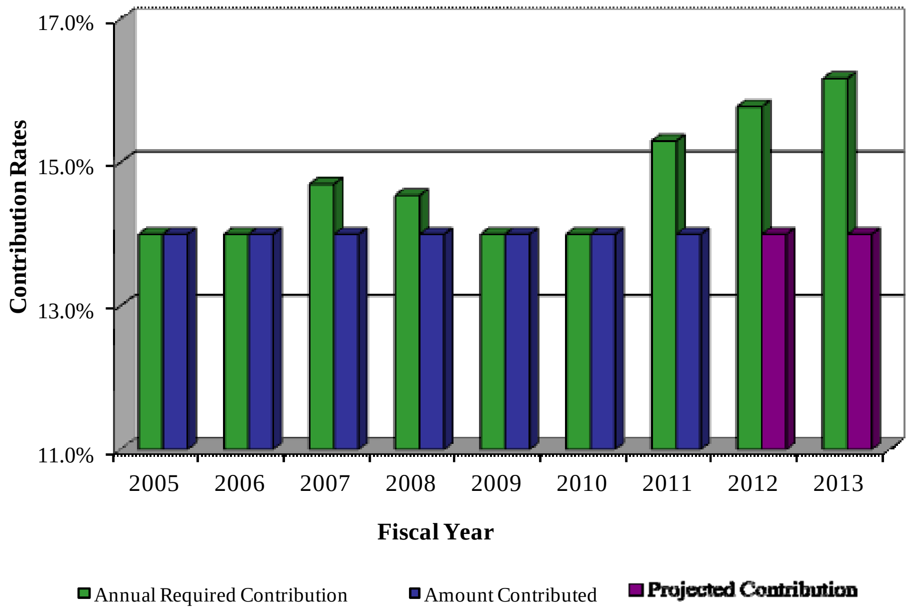
The effects of the following changes will emerge gradually over the next several years. All changes are described in Section C.

- Acts 41 and 45 – Definitions and technical corrections
- Act 66 – National Guard service
- Act 136 – Interest on contributions stop after death
- Act 137 – Codifying of disability and survivor benefit practices
- Act 138 – Limit look back period to 5 years
- Act 162 – TDROP reduction includes reciprocal service
- Act 163 – Contract buyout
- Act 224 – Rescission of retirement
- Act 225 – Anti-spiking
- Act 513 – Eliminate stacking of community college wages
- Act 557 – Selection of option beneficiaries
- Act 565 – Define "terminate"
- Act 973 – Strengthen disability requirements
- Act 974 – Increase to 160 days
- Act 976 – Refund cancels non-contributory service

The Arkansas Teacher Retirement System remains stable with a 71.8% funded position as of June 30, 2011. However without sustained investment gains over the next few years or an increase in contributions, it is likely that the amortization period will increase next year.

\# *This return figure was calculated by the actuary and may not exactly match your investment consultant's figure.*

The following graph shows a history of the amounts contributed vs. the annual required contributions (ARC) and a projection of the amounts that are expected to be contributed in FY12 and FY13.



Since the amortization period exceeded 30 years in the 2005, 2006, 2009, 2010 and 2011 valuations, the amount contributed is less than the ARC in FY 2007, FY 2008 and FY 2011 and will also be less than the ARC in FY 2012 and FY 2013. In FY 2009 (June 30, 2007 valuation) and FY 2010 (June 30, 2008 valuation), the amount contributed equaled the ARC.

Recommendations: This report reflects new assumptions adopted in conjunction with a recently completed five year experience study. The new assumptions are less conservative than the previous assumptions. This means that the amortization period is lower that it would have been under the old assumptions. Therefore, we encourage the Board to monitor the operation of the assumptions carefully over the next several years.

SECTION B

VALUATION RESULTS

EMPLOYER CONTRIBUTION RATE COMPUTED AS OF JUNE 30, 2011 FOR THE FISCAL YEAR ENDING JUNE 30, 2013

	Percents of Active Member Payroll			
Computed Contributions for	**Teachers**	**Support**	**Combined**	**Prior Year**
Normal Cost				
Age & Service Annuities	9.55%	7.19%	**8.82%**	10.14%
Deferred Annuities	1.60%	2.12%	**1.76%**	1.39%
Survivor Benefits	0.19%	0.16%	**0.18%**	0.28%
Disability Benefits	0.47%	0.42%	**0.45%**	0.60%
Refunds of Member Contributions	0.37%	0.77%	**0.49%**	0.48%
Total	12.18%	10.66%	**11.70%**	12.89%
Average Member Contributions	5.09%	3.92%	**4.72%**	4.68%
Net Employer Normal Cost	7.09%	6.74%	**6.98%**	8.21%
Unfunded Actuarial Accrued Liabilities			**7.02%**	5.79%
Employer Contribution Rate			**14.00%**	14.00%
Amortization Years			**66.0**	52.4

The amortization period is the number of years it will take to pay off the unfunded liability of $4.4 billion assuming that the employer contribution rate remains at the 14% of payroll level. Since 2000, the period has varied from a low of 19 years to a high of 125 years. Unless there is a substantial investment gain in FY 2012, it is very likely that the amortization period will increase significantly in the next valuation.

COMPUTED EMPLOYER CONTRIBUTION RATES
10-YEAR COMPARATIVE STATEMENT

Valuation Date June 30	Active Members in Valuation **		Average Annual Pay		Consumer Price (Inflation) Index		Employer Contributions	
	Number	Annual Payroll ($Millions)	Amount	% Change	Value	% Change	Computed Financing Period	Total Employer Rate
2002*	62,011	$1,628	$26,254	3.5 %	179.9	1.1 %	38	12.0 %
2003#	62,432	1,683	26,963	2.7 %	183.7	2.1 %	36	13.0 %
2004#	63,185	1,748	27,660	2.6 %	189.7	3.3 %	31	14.0 %
2005	65,793	1,962	29,826	7.8 %	194.5	2.5 %	38	14.0 %
2006	67,710	2,080	30,714	3.0 %	202.9	4.3 %	36	14.0 %
2007#	69,226	2,191	31,645	3.0 %	208.4	2.7 %	19	14.0 %
2008#	70,172	2,268	32,319	2.1 %	218.8	5.0 %	21	14.0 %
2009	70,655	2,318	32,804	1.5 %	215.7	(1.4)%	45	14.0 %
2010#	72,208	2,381	32,980	0.5 %	218.0	1.1 %	52	14.0 %
2011#*	76,780	2,728	35,534	7.7 %	225.7	3.6 %	66	14.0 %

* *Revised assumptions.*

\# *Legislated benefit or contribution rate changes.*

** *Beginning with the June 30, 2011 valuation, active members include TDROP members and payroll.*

COMPUTED ACTUARIAL LIABILITIES AS OF JUNE 30, 2011

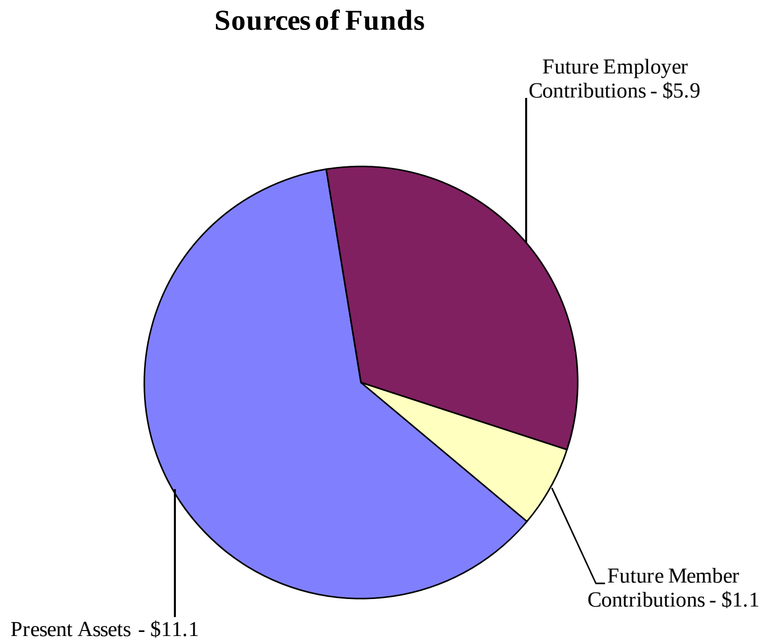
		Entry Age Actuarial Cost Method	
Actuarial Present Value of	**(1) Total Present Value**	**(2) Portion Covered by Future Normal Cost Contributions**	**(3) Actuarial Accrued Liabilities (1)-(2)**
Age and service retirement allowances based on total service likely to be rendered by present active members.	$ 7,112,131,467	$1,908,828,798	$ 5,203,302,669
Age and service retirement allowances based on total service likely to be rendered by present T-DROP members.	2,457,217,418	41,987,611	2,415,229,807
Vested Deferred Benefits likely to be paid present active and inactive members.	1,085,428,448	385,115,112	700,313,336
Survivor benefits expected to be paid on behalf of present active members.	111,286,610	39,410,744	71,875,866
Disability Benefits expected to be paid on behalf of present active members.	186,172,453	97,621,781	88,550,672
Refunds of Member contributions expected to be paid on behalf of present active members.	14,497,122	104,823,436	(90,326,314)
Benefits payable to present retirees and beneficiaries.	7,053,680,291	0	7,053,680,291
Lump Sum Death benefits payable to present retirees and beneficiaries.	78,672,931	0	78,672,931
Total	$18,099,086,740	$2,577,787,482	$15,521,299,258
Applicable Assets	11,146,221,518	0	11,146,221,518
Liabilities to be Covered by Future Contributions	$ 6,952,865,222	$2,577,787,482	$ 4,375,077,740

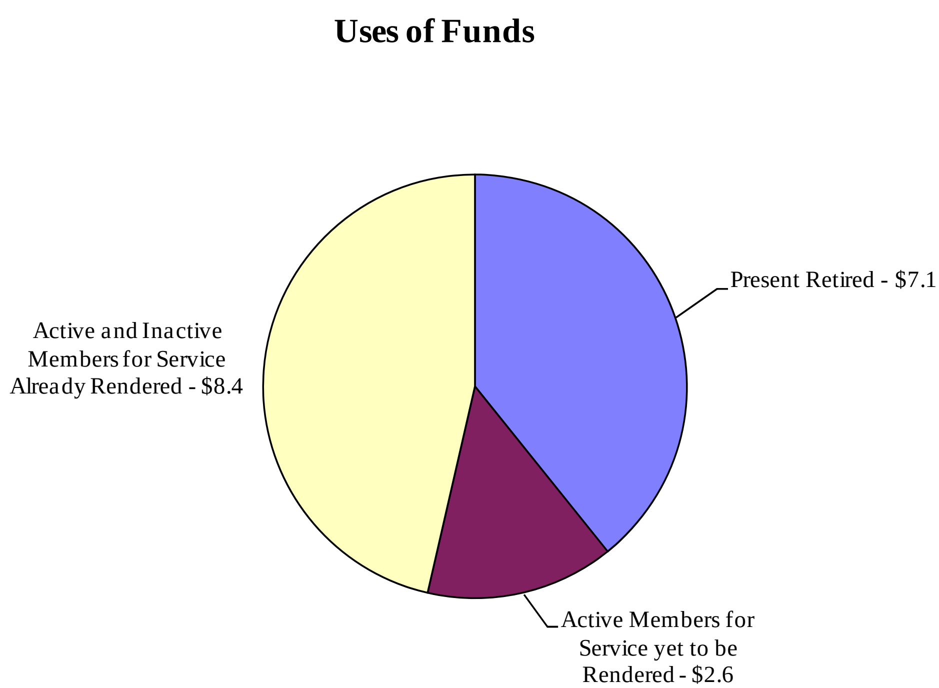
LIABILITIES FOR ANNUITIES BEING PAID JULY 1, 2011
TABULATED BY TYPE OF ANNUITY BEING PAID

Type of Annuity	Liabilities July 1, 2011* Men	Women	Totals
RETIREMENT RESERVE ACCOUNT			
Age & Service Annuities			
Option 1 (Straight Life)	$ 994,981,035	$ 3,748,392,983	$ 4,743,374,018
Option A (100% Joint & Survivor)	514,596,721	393,518,840	908,115,561
Option B (50% Joint & Survivor)	290,811,825	334,222,162	625,033,987
Option C (10 Years Certain & Life)	44,186,157	128,971,022	173,157,179
Beneficiaries	26,843,600	95,115,060	121,958,660
Total Age & Service	1,871,419,338	4,700,220,067	6,571,639,405
Disability Annuities			
Option 1	35,848,414	205,380,049	241,228,463
Option A	22,135,906	27,012,942	49,148,848
Option B	5,269,474	8,469,582	13,739,056
Option C	1,457,266	7,691,751	9,149,017
Beneficiaries	19,560,784	21,314,836	40,875,620
Total Disability	84,271,844	269,869,160	354,141,004
Act 793	14,076,268	6,620,232	20,696,500
Total Retirement Reserve Account			6,946,476,909
SURVIVORS' BENEFIT ACCOUNT			
Beneficiaries of Deceased Members	$ 33,179,043	$ 47,971,342	$ 81,150,385
OTHER LIABILITIES			
Act 808	$ 18,930,166	$ 7,122,831	$ 26,052,997
RETIREMENT SYSTEM TOTALS			
Total Annuity Liabilities			$ 7,053,680,291

* *Does not include liabilities associated with lump sum death benefit.*

FINANCING $18.1 BILLION* OF BENEFIT PROMISES FOR PRESENT ACTIVE AND RETIRED MEMBERS JUNE 30, 2011





* *Present value of future benefits. All amounts are in billions.*

SHORT CONDITION TEST

ATRS' funding objective is to meet long term benefit promises through contributions that remain approximately level from year to year as a percent of member payroll. If the contributions to the System are level in concept and soundly executed, the System will ***pay all promised benefits when due -- the ultimate test of financial soundness***. Testing for level contribution rates is the long term test.

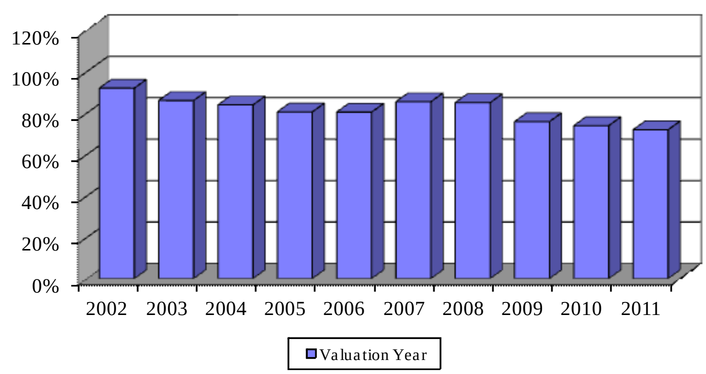
A short condition test is one means of checking a system's progress under its funding program. In a short condition test, the plan's present assets (cash and investments) are compared with: 1) Member contributions on deposit; 2) The liabilities for future benefits to present retired lives; 3) The liabilities for service already rendered by members. In a system that has been following the discipline of level percent-of-payroll financing, the liabilities for member contributions on deposit (liability 1) and the liabilities for future benefits to present retired lives (liability 2) will be fully covered by present assets (except in rare circumstances). In addition, the liabilities for service already rendered by members (liability 3) will be partially covered by the remainder of present assets. The larger the funded portion of liability 3, the stronger the condition of the system. Liability 3 being fully funded is unusual.

The schedule below illustrates the history of liability 3 of the System and is indicative of the ATRS objective of following the discipline of level percent-of-payroll financing.

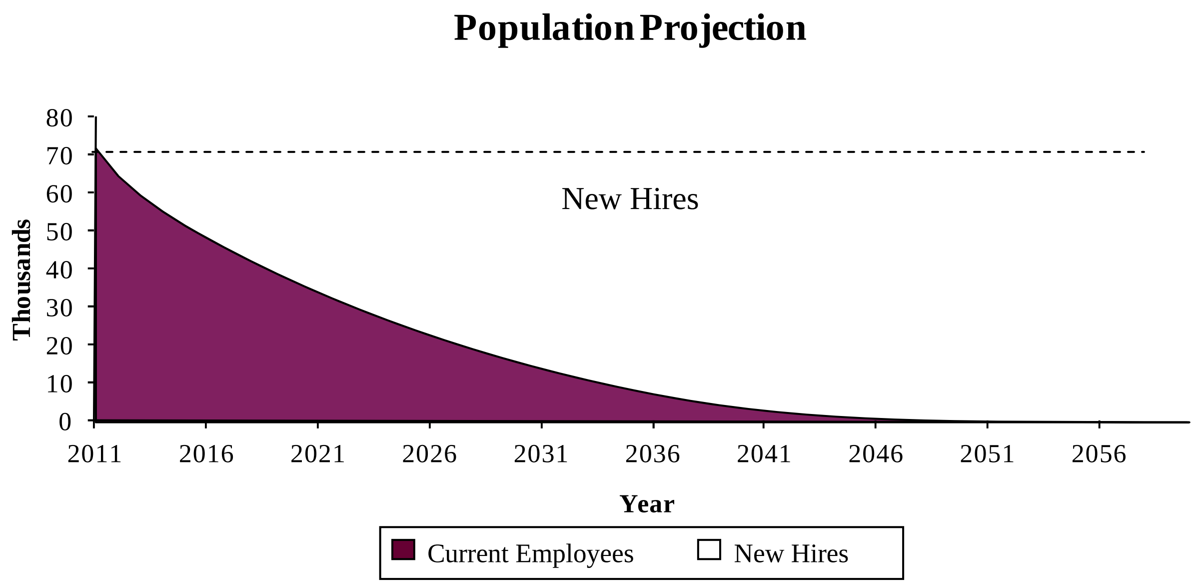
Val. Date June 30	(1) Member Contrb.	(2) Retirees and Benef.	(3) Active and Inactive Members (Employer Financed Portion)	Present Valuation Assets	Portion of Present Values Covered by Present Assets			
					(1)	(2)	(3)	Total
	-----------------------$ Millions-----------------------							
2002*	$490	$3,441	$5,131	$8,328	100%	100%	86%	92%
2003#	521	3,706	5,218	8,113	100%	100%	74%	86%
2004#	547	3,985	5,518	8,424	100%	100%	71%	84%
2005	586	4,276	6,111	8,817	100%	100%	65%	80%
2006	630	4,617	6,376	9,332	100%	100%	64%	80%
2007#	679	4,960	6,690	10,519	100%	100%	73%	85%
2008#	732	5,544	7,058	11,319	100%	100%	71%	85%
2009	790	6,041	7,188	10,617	100%	100%	53%	76%
2010#	848	6,516	7,333	10,845	100%	100%	47%	74%
2011#*	929	7,132	7,460	11,146	100%	100%	41%	72%

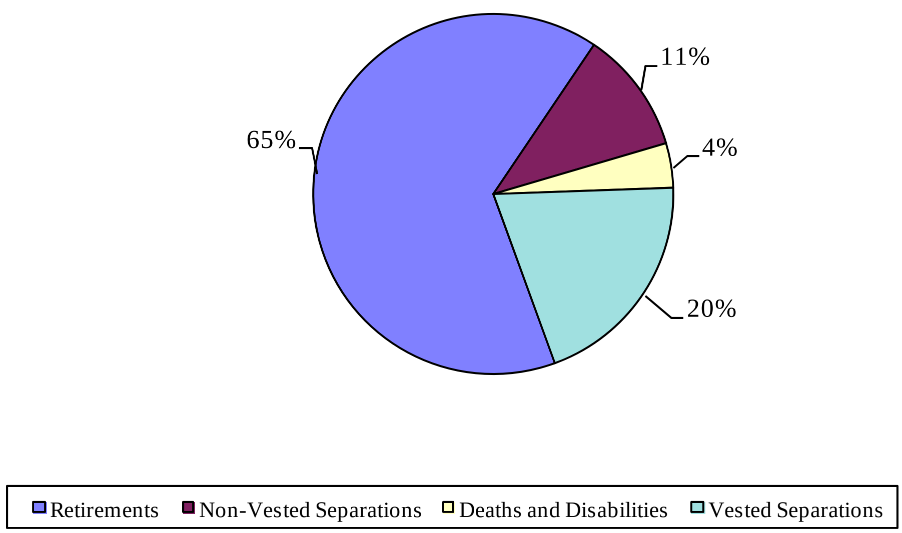
* *Revised actuarial assumptions or methods.*
\# *Legislated benefit or contribution rate change.*

Actuarial Value of Assets as Percents of Accrued Liabilities (Funded Ratio)



EXPECTED DEVELOPMENT OF PRESENT POPULATION JUNE 30, 2011 (EXCLUDES T-DROP AND REHIRED RETIREES)





The charts show the expected future development of the present population in simplified terms. The retirement system presently covers 72,293 active members (excludes T-DROP). Eventually, 11% of the population is expected to terminate covered employment prior to retirement and forfeit eligibility for an employer provided benefit. Approximately 85% of the present population is expected to receive monthly retirement benefits. Approximately 4% of the present population is expected to become eligible for death-in-service or disability benefits. Within 10 years, over half of the covered membership is expected to consist of new hires.

SECTION C

SUMMARY OF BENEFITS

1. **Voluntary Retirement.** A member may retire at age 60 with 5 or more years of credited service, or after 28 years of credited service regardless of age.

2. **Early Retirement.** A member who has more than 25 but less than 28 years of credited service and has not attained age 60 years may retire and receive an immediate early retirement annuity. The early annuity is an age & service annuity reduced by the lesser of (i) and (ii) below:

   (i) 5/12 of 1% multiplied by the number of months by which early retirement precedes completion of 28 years of service, or

   (ii) 5/12 of 1% multiplied by the number of months by which early retirement precedes the attainment of age 60 years.

3. **Deferred Retirement.** An inactive member who has 5 or more years of credited service will be entitled to an age & service annuity beginning at age 60, provided accumulated contributions are left on deposit with the retirement system.

4. **Disability Retirement.** An active member, with 5 or more years of credited service, who becomes totally and permanently disabled may be retired and receive a disability annuity computed in the same manner as an age & service annuity. In order to qualify for disability retirement, the member must exhibit symptoms of physical or mental incapacitation while the member is employed by a system employer as an active member (Act 973 of 2011).

5. **Final Average Salary (FAS).** A member's final average salary is the average of the annual salaries paid during the period of 3 years of credited service producing the highest annual average. Beginning July 1, 2009, no salary paid in any year which is utilized in the computation of the members' final average salary, shall exceed 120% of the salary earned in the preceding year. If a member has a break in covered employment for eight years or more between any of the member's highest salary years used in the calculation of final average salary, then anti-spiking checking does not apply to the next highest year in the formula (Act 225 of 2011 – effective date of law July 27, 2011). There will no longer be any stacking of part-time college/teaching work for school district employees (Act 513 of 2011).

6. **Age & Service Annuity and Disability Annuity.** The annuity payable will not be less than the total of: years of contributory service times 2.15% of FAS; plus years of non-contributory service times 1.39% of FAS; plus $900 for all members with 10 or more years of ATRS credited service. For a member who elected to contribute on only the first $7,800 of each annual salary after June 30, 1969, each annual salary used in computing FAS is limited to a maximum of $7,800.

7. **Minimum Straight Life Annuity.** If a contributory member has 5 or more years of credited service, the straight life annuity will not be less than $100 per month. The minimum benefit for a non-contributory member is $64 per month. If a contributory member has 10 or more years of credited service, the straight life annuity will not be less than $150 per month. The minimum benefit for a non-contributory member is $94 per month.

8. **T-DROP.** A member with 28 or more years of service may participate in the Teacher Deferred Retirement Option Plan (T-DROP, Act 1096 of 1995). An amount equal to the amount that would have been paid had the member retired, reduced by 1% for each year of contributory, 1% for each year of reciprocal (Act 162 of 2011) and 6/10% for each year of non-contributory service, is deposited into a T-DROP account. Members who enter T-DROP with less than 30 years of service are subject to an additional 6% reduction for each year less than 30 years. The annual addition to the T-DROP account is increased each year by 3% of the member's annuity at the initial participation date and the account is credited with 2% less than the system's rate of return (but not less than 2%, nor greater than 6% interest on the mean balance) each year. Deposits to T-DROP cease at the earlier of 10 years of T-DROP participation or separation from service. T-DROP participants may continue in covered employment after 10 years of participation, but do not accumulate additional service credit or make member contributions. Beginning July 1, 2010, members who remain in T-DROP for more than 10 years get interest on T-DROP account balances. The 10-year plus T-DROP interest rate that will be credited to an active members' T-DROP account must be no less than 4% and no greater than 6% as determined by the Board of Trustees. Upon actual retirement, the member may receive the T-DROP account balance in the form of a lump sum or as an additional annuity. Beginning July 1, 2011, the T-DROP distribution may be a combination of both lump sum and annuity allowing members to take a partial annuity along with a corresponding partial lump sum (Act 162 of 2011).

9. **Post-Retirement Increases.** Each July 1, annuities are adjusted to be equal to the base annuity times 100% plus 3% for each full year in the period from the effective date of the base annuity to the current July 1. The base annuity is the amount of the member's annuity on the later of July 1, 2001 or the effective date of retirement, as re-determined by Acts 396 of 1999 and 992 of 1997. *The July 1, 2009 cost of living adjustment for retirees was compounded. The annuity was adjusted by multiplying 3% times the June 30, 2009 retirement benefit amount. After it was calculated on July 1, 2009, the base amount was reset to be the July 1, 2009 benefit amount. Future cost of living raises will be established by the new updated base amount. Future cost of living adjustments will be evaluated on an annual basis to determine if a simple or compound cost of living increase will be given, depending on the financial condition of the System.*

10. **Survivor Benefits.** Upon the death of an active member, who has 5 or more years of credited service (which includes the year immediately preceding the death), the following annuities are payable:

    (a) The surviving spouse receives an annuity computed in the same manner as if the member had (i) retired the date of his death with entitlement to an annuity, (ii) elected Option A - 100% Survivor Annuity, and (iii) nominated the spouse as joint beneficiary. If the member has attained age 60 and has acquired 5 years of credited service or has acquired 25 years of credited service regardless of age, the annuity begins immediately; otherwise the annuity begins the month following the date the member would have attained age 60. Under certain circumstances, a lump sum distribution may be made to the beneficiary(ies) of the deceased member.

    (b) Each dependent child receives an annuity in an amount equal to 20% of the highest salary received in covered employment (including the year of death). If there are 3 or more dependent children, the aggregate amount of the dependent children's annuity shall not exceed 60% of the member's highest salary received in covered employment and shall be divided equally among the dependent children. A child is dependent until the child's death, marriage, or attainment of age 18 (age 23 if the child is a full-time student).

11. **Lump Sum Death Benefit.** Beneficiaries of deceased active members or retirees with 10 or more years of ATRS credited service are eligible to receive a lump sum death benefit of up to $10,000 ($6,667 for non-contributory service-benefit). The amount will be prorated for members who have both contributory service and non-contributory service. Members with 15 or more years of contributory service will receive the full $10,000 (Act 977 of 2011).

12. **Members' Contributions.** Members contribute 6% of their salaries (by individual election, members who became members before July 1, 1971 could contribute on only the first $7,800 of their annual salaries). If a member leaves service prior to becoming eligible to retire, the accumulated contributions are returned upon request. No interest is credited to a member's contributions for the first year of membership; after 1 year, interest credits are 2% annually (effective June 30, 2010). Effective July 1, 1986, a non-contributory plan was created. Effective July 1, 1993, all new members including any former active members were automatically non-contributory members. By individual election, members could choose to contribute. The benefit accrual rate for non-contributory members is reduced. Effective July 1, 1999 the default choice for new members is contributory. All current members had until July 1, 2000 to make a final election. Effective July 1, 1997, all future member contributions are tax-deferred in accordance with §414(h) of the Internal Revenue Code of the United States. Effective July 1, 2005, all non-contributory members whose status changes from support to teacher (contracted for more than 181 days), will become contributory. Effective July 1, 2006 and each July 1 thereafter, members who previously elected to be non-contributory may elect to change to contributory status under Act 385 of 2005. Effective July 1, 2007, all noncontributory members may elect to change to contributory status. The election is irrevocable. Effective July 1, 2009, employer contributions are collected at a rate of 14% on active members, T-DROP participants (even those who work beyond the 10-year participation period), and working retirees (Act 743 of 2009).

13. **Act 808 Retirement.** Any employee of a state agency who was an active member of the Arkansas Teacher Retirement System on April 8, 1987, and who qualified for retirement before January 1, 1988, could become a member of the Arkansas Public Employees Retirement System and retire from that system. All credited service was transferred to that system but the member's contributions were retained by the Arkansas Teacher Retirement System and the benefit amount is transferred monthly to the Arkansas Public Employees Retirement System. Each July 1, annuities are adjusted by 3% (compound escalator).

14. **Act 793 Retirement.** Any employee who was a member of the rehabilitation services in 1977 was permitted to become a member of the Arkansas Public Employees Retirement System. Liabilities associated with prior service earned through 6/30/1978 remain in the Arkansas Teacher Retirement System. Future service is allocated to the Arkansas Public Employees Retirement System. Each July 1, annuities are adjusted by 3% (compound escalator).

15. **Retiree Health Stipend.** Each retired member as of June 30, 2008, with 5 or more years of ATRS credited service receives $75 per month toward retiree health care premiums. Members in T-DROP do not receive the $75 per month until actual retirement. For all members retiring on or after July 1, 2008, a minimum of 10 years of ATRS credited service is required to receive the $75 per month stipend.

16. **Optional Forms of Benefits:**

Option 1 ***(Straight Life Annuity)***

A member will receive the maximum monthly benefit for which he/she qualifies, throughout his/her lifetime. No monthly benefits will be paid to his/her beneficiary after the member's death. Should a member die before he/she has drawn in benefits an amount equal to his/her contributions plus earned interest, the balance will be paid to a designated beneficiary. The designated beneficiary may be anyone chosen by the member.

Option A ***(100% Survivor Annuity)***

Under this option a member will receive a reduced annuity throughout his/her lifetime. Upon the member's death, the designated beneficiary will receive the same annuity for the balance of his/her lifetime.

Option B ***(50% Survivor Annuity)***

Under this option a member will receive a reduced annuity throughout his/her lifetime. Upon the member's death, the designated beneficiary will receive one-half (1/2) of this annuity for the balance of his/her lifetime.

Option C (Annuity for Ten Years Certain and Life Thereafter)

A reduced monthly benefit payable for 120 months. After that time, a member's monthly allowance will revert to the amount he/she would have received under the regular plan and continue for life. If the member dies before receiving 120 payments, the designated beneficiary will receive a monthly benefit in the same amount until monthly benefits to both the member and the beneficiary equal 120 monthly payments. No further benefits are then payable to the beneficiary.

Option Factors are based upon an 8.0% interest rate and the 1971 Group Annuity Mortality Table projected to 1984, with a 75% unisex mix.

17. **Refund of Member Contributions.** Any termination refund made to a member or a lump sum payout made to a surviving spouse after July 1, 2011, cancels all service credit, including noncontributory service credit, (Act 976 of 2011); any repurchase of refunded service will be as contributory years at actuarial cost (Act 69 of 2011).

18. **Rescission of Retirement.** Effective July 1, 2011, rescission of retirement was repealed from Arkansas code (Act 224 of 2011). ATRS will continue to honor the agreements of rescinded members that were in effect prior to Act 224 of 2011.

19. **Contract Buyout.** During periods of contract buyout/litigation/termination, members will not receive service credit if no on-call service or on site work is performed. ATRS will not spread litigation settlements over past years as had been historic practice, and will not allow the purchase of the time between actual work and the settlement (Act 163 of 2011).

20. **Actuarial Cost of Service.** Effective July 1, 2011, all service purchases will be at actuarial cost (Act 69 of 2011).

21. **Deceased Member Refund of Contributions.** Effective July 1, 2011, if a beneficiary is not eligible for survivor benefits, or if a surviving spouse is eligible and chooses a contribution refund, the interest on the refund stops the July 1 following the member's death (Act 136 of 2011).

22. **Limit Lookback to Five Years.** Effective July 1, 2011, absent intentional nondisclosure, fraud, misrepresentation, or criminal act, members can no longer establish old service previously unreported (Act 138 of 2011). (More than 20 cases per year.)

23. **Service Credit Requirements.** Effective July 1, 2011, members must receive 160 days of service to be credited with a year of service credit (Act 974 of 2011).

SAMPLE BENEFIT COMPUTATIONS FOR A MEMBER RETIRING JUNE 30, 2011

The data for the Example member is shown below.

A.	$35,000	Final Average Compensation
B.	32	Total Service Credit
C.	27	Contributory Service Credit
D.	60	Age of Retiree
E.	55	Age of Spouse
F.	100%	Percentage of Retirement Allowance to Continue to Spouse after Retiree's Death (Retiree Chooses this Percentage)

The computations that would be made for this case are:

		Annual
G.	Non-Contributory Base: 0.0139 x A x B	$15,568
H.	Extra for Contributory: 0.00760 x A x C	7,182
I.	Subtotal Benefit: G + H	22,750
J.	Health Stipend	900
K.	Total Benefit: I + J	23,650
L.	Adjustment for Line F election: (1 - 0.83037) x I	3,859
M.	Annual Amount Payable	$19,791

Projected Benefits, taking into account increases after retirement would be:

Year Ended June 30	Annual Amount
2012	$19,791
2013	20,385
2014	20,979
2015	21,573
2016	22,167

Thereafter, the amount would increase by $594 annually for life.

SAMPLE T-DROP BENEFIT COMPUTATIONS FOR A MEMBER ENTERING T-DROP JUNE 30, 2011

The data for the Example member is shown below.

A.	$35,000	Final Average Compensation
B.	28	Total Service Credit
C.	28	Contributory Service Credit
D.	55	Age of Retiree

The computations that would be made for this case are:

		Annual Amount
E.	Non-Contributory Base: 0.0139 x A x B	$13,622
F.	Extra for Contributory: 0.00760 x A x C	7,448
G.	Reduction for T-DROP Plan: (1% for each year of contributory service) 0.28 x (E+F)	5,900
H.	Reduction for Entering T-DROP with less than 30 years of service (6% for each year less than 30): 0.12 x (E + F - G)	1,820
I.	Annual Amount Payable E + F – G – H	$13,350

Projected Deposits, taking into account increases after DROP, and 5 years duration would be:

Year Ended June 30	Amount Deposited
2012	$13,350
2013	13,751
2014	14,151
2015	14,552
2016	14,952
Total	70,756

The total amount deposited, together with credited interest can be paid as a lump sum or as an annuity.

SECTION D

FINANCIAL INFORMATION AND GASB REPORTING

This information is presented in draft form for review by the System's auditor. Please let us know if there are any items the auditor changes so that we may maintain consistency with the System's financial statements.

ASSET VALUATION METHOD

An essential step in the valuation process is comparing valuation assets with computed liabilities. Valuation assets are those assets that are recognized for funding purposes.

Asset valuation methods are distinguished by the timing of the recognition of investment income. Total investment income is the sum of ordinary income and capital value changes. Under a pure market value approach, ordinary investment income and all capital value changes would be recognized immediately. Because of market volatility, use of pure market values in retirement funding can result in volatile contribution rates and unstable financial ratios, contrary to ATRS objectives.

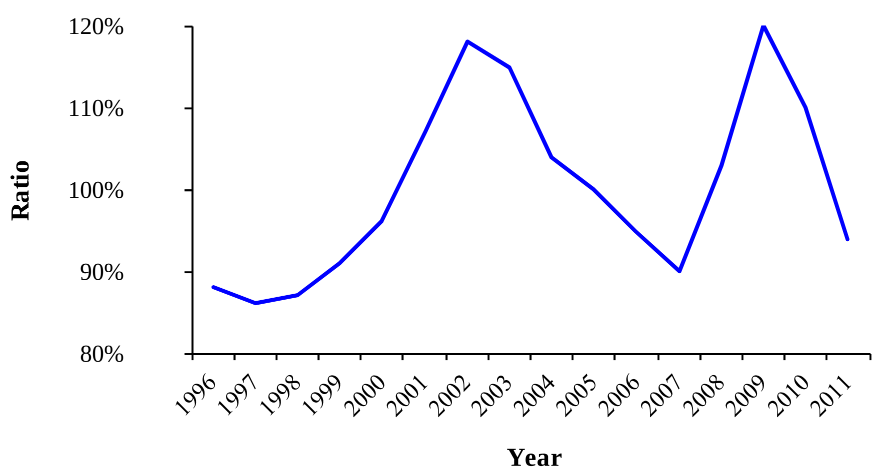
Under the ATRS asset valuation method (see page D-3), assumed investment return is recognized fully each year. Differences between actual and assumed investment return are phased in over a closed 4-year period. During periods when investment performance exceeds the assumed rate, the funding value will tend to be less than the market value. Conversely, during periods when investment performance is less than the assumed rate, funding value will tend to be greater than market value. If assumed rates are exactly realized for 3 consecutive years, funding value will become equal to market value.

A multi-year comparison of market value to funding (actuarial) value is on the following page.

ASSET VALUATION METHOD

Valuation Date June 30	Market Value of Assets (1)	Actuarial Value of Assets (2)	Ratio of AV to MV (2) / (1)
1996	$ 4,750	$ 4,186	88%
1997	5,747	4,956	86%
1998	6,656	5,815	87%
1999	7,403	6,740	91%
2000	7,978	7,620	96%
2001	7,643	8,166	107%
2002	7,084	8,328	118%
2003	7,050	8,113	115%
2004	8,122	8,424	104%
2005	8,811	8,817	100%
2006	9,868	9,332	95%
2007	11,637	10,519	90%
2008	11,018	11,319	103%
2009	8,847	10,617	120%
2010	9,884	10,845	110%
2011	11,895	11,146	94%

Ratio of Actuarial Value to Market Value



This year the market value of assets exceeds the actuarial value by approximately 6%. To prevent unreasonably large differences between market value and funding value, there is a requirement that the recognized assets must always be between 80% and 120% of the market value (see page D-3).

DEVELOPMENT OF FUNDING VALUE OF ASSETS

Year Ended June 30:	2009	2010	2011	2012	2013	2014
A. Funding Value Beginning of Year	$ 11,319,195,490	$ 10,616,711,074	$ 10,845,091,623			
B. Market Value End of Year	8,847,259,228	9,883,573,998	11,894,877,338			
C. Market Value Beginning of Year	11,018,088,336	8,847,259,228	9,883,573,998			
D. Non-Investment Net Cash Flow	(171,572,047)	(203,490,973)	(200,981,038)			
E. Investment Return						
E1. Market Total: B - C - D	(1,999,257,061)	1,239,805,743	2,212,284,378			
E2. Amount for Immediate Recognition (8%)	898,672,757	841,197,247	859,568,088			
E3. Amount for Phased-In Recognition: E1-E2	(2,897,929,818)	398,608,496	1,352,716,290			
F. Phased-In Recognition of Investment Return						
F1. Current Year: 0.25 x E3	(724,482,455)	99,652,124	338,179,073	Unknown	Unknown	Unknown
F2. First Prior Year	(330,102,709)	(465,185,644)	99,652,124	$ 338,179,073	Unknown	Unknown
F3. Second Prior Year	286,310,502	(330,102,709)	(465,185,644)	99,652,124	$ 338,179,073	Unknown
F4. Third Prior Year	116,579,966	286,310,504	(330,102,708)	(465,185,645)	99,652,124	$ 338,179,071
F5. Accelerated Market Value Recognition						
F6. Total Recognized Investment Gain	**(651,694,696)**	**(409,325,725)**	**(357,457,155)**	**(27,354,448)**	**437,831,197**	**338,179,071**
G. Funding Value End of Year:						
G1. Preliminary Funding Value End of Year: A+D+E2+F6	**11,394,601,504**	**10,845,091,623**	**11,146,221,518**			
G2. Upper Corridor Limit: 120% x B	**10,616,711,074**	**11,860,288,798**	**14,273,852,806**			
G3. Lower Corridor Limit: 80% x B	**7,077,807,382**	**7,906,859,198**	**9,515,901,870**			
G4. Funding Value End of Year	**10,616,711,074**	**10,845,091,623**	**11,146,221,518**			
H. Actual/Projected Difference between Market and Funding Value	(1,769,451,846)	(961,517,625)	748,655,820	776,010,268	338,179,071	437,831,197
I. Market Rate of Return	(18.29)%	14.18 %	22.61 %			
J. Funding Rate of Return	(4.73)%	4.11 %	4.67 %			
K. Ratio of Funding Value to Market Value	120.00 %	109.73 %	93.71 %			

The Funding Value of Assets recognizes assumed investment return (line E2) fully each year. Differences between actual and assumed investment income (line E3) are phased-in over a closed 4-year period. During periods when investment performance exceeds the assumed rate, Funding Value of Assets will tend to be less than Market Value. During periods when investment performance is less than the assumed rate, Funding Value of Assets will tend to be greater than Market Value. ***The Funding Value of Assets is unbiased with respect to Market Value***. At any time it may be either greater or less than Market Value. If assumed rates are exactly realized for 3 consecutive years, it will become equal to Market Value.

The assets of the Retirement System, as of June 30, 2011, were reported to your actuary to be $11,894,877,338. This amount, together with a market value adjustment of $(748,655,820), is used to finance the Retirement System liability.

Accounts	Assets at June 30	
	2011	2010
Regular Accounts		
Members' Deposit Accounts		
Contributions	$ 906,729,288	$ 825,356,318
Interest	5,884,474,943	4,251,597,199
Total	6,791,204,231	5,076,953,517
T-Drop Member Deposit Accounts		
Contributions	22,695,163	22,399,345
Interest	63,272,787	65,308,285
Total	85,967,950	87,707,630
Employer's Accumulation Account	(2,305,274,099)	(2,159,220,193)
Retirement Reserve Account	6,716,326,675	6,295,405,026
Act 808 Retirement Reserve Account	23,536,031	24,070,458
T-Lump Payable	499,574,370	477,341,359
Survivors Benefit Account	74,430,187	73,945,474
Total Regular Accounts	11,885,765,345	9,876,203,271
Other Accounts		
Income Expense Account	9,111,993	7,370,727
Other Special Reserves	-	-
Miscellaneous	-	-
Total Other Accounts	9,111,993	7,370,727
Total Accounting Value of Assets	11,894,877,338	9,883,573,998
Market Value Adjustment	(748,655,820)	961,517,625
Funding Value of Assets	$ 11,146,221,518	$ 10,845,091,623

MARKET VALUE OF ASSETS

The net market value of assets at year end was $11,894,877,338 and was invested as shown below.

	Market Value at June 30	
	2011	**2010**
Cash	$ 15,052,519	$ 14,275,701
Receivables		
Unsettled Trades and Accrued Return	423,533,336	135,556,752
Member Contributions	31,028,974	13,322,861
Employer Contributions	56,133,695	47,603,035
Other	248,106	355,154
Total Receivables	510,944,111	196,837,802
Investments		
Short Term	205,606,740	151,906,073
Common and Preferred	2,533,920,459	2,094,811,529
International	862,924,811	683,344,612
Corporate Bonds	676,359,850	719,770,128
Alternative Investments	2,368,128,250	1,785,137,499
Real Estate	85,549,942	95,516,585
Mortgage Loans	46,918,035	49,260,532
Municipal Bonds	2,213,000	6,825,711
Government Securities	131,974,040	119,361,250
Other Investments	4,940,642,661	4,147,469,198
Repurchase Agreements	-	-
Total Investments	11,854,237,788	9,853,403,117
Invested Securities Lending	704,310,559	775,718,032
Net Equipment	391,843	399,039
Total Assets	13,084,936,820	10,840,633,691
Liabilities		
Escrow Payables	-	-
Other Payables	2,473,092	1,730,357
Securities Related Payables	480,275,433	171,301,146
Securities Lending Collateral	707,310,957	784,028,190
Total Liabilities	1,190,059,482	957,059,693
Net Market Value	$ 11,894,877,338	$ 9,883,573,998
Change from Prior Year	2,011,303,340	1,036,314,770

MARKET VALUE RECONCILIATION

Market value reconciliation assets during the year developed as follows:

	Year Ended June 30	
	2011	2010
Net Market Value July 1	$ 9,883,573,998	$ 8,847,259,228
Additions		
Employer Contributions	400,330,902	389,296,432
Employee Contributions	139,460,601	115,931,733
Appreciation	2,113,420,701	1,134,702,070
Interest	72,057,708	69,936,507
Dividends	64,607,311	57,916,141
Real Estate	5,127,685	4,273,914
Other	4,012,265	5,863,424
Securities Lending Activity	2,979,533	3,180,175
Total Additions	2,801,996,706	1,781,100,396
Deductions		
Age & Service Benefits	584,859,307	543,347,733
Disability Benefits	30,034,768	28,795,197
Option Benefits	16,873,271	15,896,678
Survivor Benefits	7,793,789	7,433,950
Reciprocal Service	27,854,621	25,041,796
Act 808	4,090,231	4,131,275
Refunds	8,906,441	7,156,354
Active Member Death	410,871	499,993
T-DROP Benefits	59,949,242	76,416,162
Investment Expense	42,371,866	28,837,090
Administrative Expense	7,548,484	7,229,398
Total Deductions	790,692,891	744,785,626
Miscellaneous	(475)	-
Net Market Value June 30	$ 11,894,877,338	$ 9,883,573,998

SCHEDULE OF FUNDING PROGRESS
(DOLLAR AMOUNTS IN MILLIONS)

Valuation Date June 30	(1) Actuarial Value of Assets	(2) Entry Age AAL	(3) UAAL (2)-(1)	(4) Funding Ratio (1)/(2)	(5) Annual Payroll	(6) UAAL as % of Payroll (3)/(5)
1991+*	$2,434	$ 2,762	$ 328	88.1%	$ 909	36.1%
1992+	2,729	3,329	600	82.0%	1,077	55.7%
1993+	3,051	3,712	661	82.2%	1,120	59.0%
1994	3,307	3,960	653	83.5%	1,167	56.0%
1995*	3,626	4,257	631	85.2%	1,234	51.1%
1996	4,186	4,635	449	90.3%	1,260	35.6%
1997+	4,956	5,403	447	91.7%	1,302	34.3%
1998+*	5,815	6,188	373	94.0%	1,368	27.3%
1999+	6,740	6,834	94	98.6%	1,429	6.6%
2000+	7,620	7,879	259	96.7%	1,485	17.4%
2001+	8,166	8,561	395	95.4%	1,557	25.4%
2002*	8,328	9,062	734	91.9%	1,628	45.1%
2003+	8,113	9,445	1,332	85.9%	1,683	79.1%
2004	8,424	10,050	1,626	83.8%	1,748	93.0%
2005	8,817	10,973	2,156	80.4%	1,962	109.9%
2006	9,332	11,623	2,291	80.3%	2,080	110.1%
2007+	10,519	12,329	1,810	85.3%	2,191	82.6%
2008+	11,319	13,334	2,015	84.9%	2,268	88.8%
2009	10,617	14,019	3,402	75.7%	2,318	146.8%
2010+	10,845	14,697	3,852	73.8%	2,381	161.8%
2011+*	11,146	15,521	4,375	71.8%	2,728	160.4%

+ *Legislated benefit or contribution rate change.*
* *Revised actuarial assumptions.*

SCHEDULE OF EMPLOYER CONTRIBUTIONS

Fiscal Year Ended June 30	Valuation Date June 30	Estimated Covered Payroll	Annual Required Contribution	(A) Annual Required Contribution*	(B) Actual Contribution Dollars	(B)/(A) Percent Contributed
1995	1993	$1,167,358,783	12.0%	$140,083,054	$139,795,997	99.8%
1996	1994	1,233,547,775	12.0%	148,025,733	132,609,965	89.6%
1997	1995	1,260,191,925	12.0%	151,223,031	153,546,224	101.5%
1998	1996	1,302,185,875	12.0%	156,262,305	158,962,714	101.7%
1999	1997	1,368,394,225	12.0%	164,207,307	166,785,926	101.6%
2000	1998	1,429,104,358	12.0%	171,492,523	175,686,958	102.4%
2001	1999	1,485,415,583	12.0%	178,249,870	181,115,569	101.6%
2002	2000	1,557,116,642	12.0%	186,853,997	191,352,911	102.4%
2003	2001	1,628,005,867	12.0%	195,360,704	200,455,916	102.6%
2004	2002	1,683,364,754	13.0%	218,837,418	224,184,274	102.4%
2005	2003	1,747,706,248	14.0%	244,678,875	286,442,709	117.1%
2006	2004	1,962,360,535	14.0%	285,635,385	311,713,735	109.1%
2007	2005	2,079,642,601	14.7%	321,663,706	331,891,210	103.2%
2008	2006	2,190,658,242	14.5%	343,985,637	350,319,504	101.8%
2009	2007	2,267,883,313	14.0%	344,033,405	359,061,671	104.4%
2010	2008	2,591,786,067	14.0%	362,850,049	389,296,432	107.3%
2011	2009	2,742,706,241	15.4%	417,318,761	400,330,902	95.9%

* *Actual contributions will be based on pay actually paid throughout the year which may be different from the payroll used in this calculation. The ARC has been adjusted to include contributions expected on behalf of T-DROP participants and retirees who have returned to work, when information was available.*

SECTION E

COVERED MEMBER DATA

TOTAL ACTIVE MEMBERS IN VALUATION JUNE 30, 2011
BY ATTAINED AGE AND YEARS OF SERVICE

Attained Age	Years of Service to Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation Payroll
Under 20	346							346	$ 1,184,562
20-24	1,949	26						1,975	34,060,013
25-29	4,605	1,255	8					5,868	180,158,177
30-34	3,383	3,441	754	8				7,586	252,722,888
35-39	3,112	2,546	2,682	562	3			8,905	314,193,042
40-44	2,969	2,652	2,071	2,119	526	4		10,341	365,415,185
45-49	2,313	2,199	2,039	1,528	1,841	584	1	10,505	382,169,965
50-54	1,822	1,795	1,804	1,688	1,513	1,451	109	10,182	378,120,732
55-59	1,547	1,456	1,352	1,513	1,490	854	128	8,340	302,579,043
60	299	260	182	229	328	171	20	1,489	52,976,202
61	242	248	182	226	269	138	20	1,325	46,882,627
62	222	229	162	159	204	137	22	1,135	38,724,152
63	220	181	155	133	160	103	17	969	31,845,247
64	176	169	123	98	135	97	11	809	26,003,212
65	161	148	81	64	114	56	10	634	18,475,116
66	161	77	50	24	38	23	4	377	9,244,660
67	133	78	29	9	6	5	2	262	4,928,074
68	142	70	20	7	6	4		249	4,201,999
69	95	54	12	4	5	3	3	176	2,770,822
70 & Up	397	297	84	23	11	7	1	820	10,958,123
Totals	**24,294**	**17,181**	**11,790**	**8,394**	**6,649**	**3,637**	**348**	**72,293**	**$ 2,457,613,841**

This schedule does not include T-DROP members or retirees who returned to work.

Group Averages:
Age: 44.8 years
Service: 9.9 years

WOMEN ACTIVE MEMBERS IN VALUATION JUNE 30, 2011
BY ATTAINED AGE AND YEARS OF SERVICE

Attained Age	Years of Service to Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation Payroll
Under 20	126							126	$ 403,523
20-24	1,378	18						1,396	25,277,240
25-29	3,476	1,019	3					4,498	137,588,235
30-34	2,629	2,699	603	3				5,934	190,000,844
35-39	2,533	2,078	2,065	448				7,124	237,014,302
40-44	2,378	2,230	1,709	1,677	434	3		8,431	284,866,068
45-49	1,766	1,816	1,745	1,235	1,417	473		8,452	292,965,786
50-54	1,340	1,419	1,513	1,430	1,235	1,149	86	8,172	290,184,243
55-59	1,101	1,061	1,071	1,265	1,291	708	91	6,588	232,576,634
60	207	187	141	188	296	136	14	1,169	40,672,044
61	148	165	134	175	232	123	17	994	34,775,583
62	146	136	125	127	173	118	20	845	28,548,853
63	124	128	104	102	138	90	13	699	23,196,052
64	116	117	87	77	115	86	10	608	18,863,204
65	101	100	56	45	93	46	9	450	12,682,380
66	89	45	36	19	31	21	3	244	5,846,444
67	88	43	23	6	4	4	2	170	3,214,825
68	70	47	13	7	6	3		146	2,151,123
69	46	33	6	1	5	3	3	97	1,501,058
70 & Up	244	158	45	15	9	4	1	476	5,946,433
Totals	**18,106**	**13,499**	**9,479**	**6,820**	**5,479**	**2,967**	**269**	**56,619**	**$ 1,868,274,874**

This schedule does not include T-DROP members or retirees who returned to work.

Group Averages:

Age: 44.8 years

Service: 10.1 years

MEN ACTIVE MEMBERS IN VALUATION JUNE 30, 2011
BY ATTAINED AGE AND YEARS OF SERVICE

Attained Age	Years of Service to Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation Payroll
Under 20	220							220	$ 781,039
20-24	571	8						579	8,782,773
25-29	1,129	236	5					1,370	42,569,942
30-34	754	742	151	5				1,652	62,722,044
35-39	579	468	617	114	3			1,781	77,178,740
40-44	591	422	362	442	92	1		1,910	80,549,117
45-49	547	383	294	293	424	111	1	2,053	89,204,179
50-54	482	376	291	258	278	302	23	2,010	87,936,489
55-59	446	395	281	248	199	146	37	1,752	70,002,409
60	92	73	41	41	32	35	6	320	12,304,158
61	94	83	48	51	37	15	3	331	12,107,044
62	76	93	37	32	31	19	2	290	10,175,299
63	96	53	51	31	22	13	4	270	8,649,195
64	60	52	36	21	20	11	1	201	7,140,008
65	60	48	25	19	21	10	1	184	5,792,736
66	72	32	14	5	7	2	1	133	3,398,216
67	45	35	6	3	2	1		92	1,713,249
68	72	23	7			1		103	2,050,876
69	49	21	6	3				79	1,269,764
70 & Up	153	139	39	8	2	3		344	5,011,690
Totals	**6,188**	**3,682**	**2,311**	**1,574**	**1,170**	**670**	**79**	**15,674**	**$ 589,338,967**

This schedule does not include T-DROP members or retirees who returned to work.

Group Averages:

Age: 45.0 years
Service: 8.9 years

SUMMARY OF ACTIVE MEMBERS (EXCLUDES T-DROP AND REHIRED RETIREES)

	Teachers		Support		Total Active Members	
	No.	Valuation Payroll	No.	Valuation Payroll	No.	Valuation Payroll
Women	27,471	$ 1,287,384,929	29,148	$ 580,889,945	56,619	$ 1,868,274,874
Men	7,361	393,833,439	8,313	195,505,528	15,674	589,338,967
All	34,832	$ 1,681,218,368	37,461	$ 776,395,473	72,293	$ 2,457,613,841

	Teachers	Support	Total
Members Contributing Now	30,097	18,382	48,479
Members Not Contributing	4,735	19,079	23,814
All	34,832	37,461	72,293

		Group Averages			Active Member
June 30	Number	Age	Service	Annual Earnings	Payroll ($ Millions)
1997	56,997	43.2	9.8	$22,847	$1,302
1998	58,528	43.4	9.7	23,380	1,368
1999	59,499	43.5	9.8	24,019	1,429
2000	60,147	43.6	9.6	24,696	1,485
2001	61,389	43.7	9.5	25,365	1,557
2002	62,011	43.8	9.4	26,254	1,628
2003	62,432	44.0	9.5	26,963	1,683
2004	63,185	44.2	9.5	27,660	1,748
2005	65,793	44.2	9.4	29,826	1,962
2006	67,710	44.3	9.3	30,714	2,080
2007	69,226	44.4	9.3	31,645	2,191
2008	70,172	44.5	9.4	32,319	2,268
2009	70,655	44.7	9.5	32,804	2,318
2010	72,208	44.7	9.7	32,980	2,381
2011	72,293	44.8	9.9	33,995	2,458

The figures on this historical schedule are affected by the inclusion of new non-teaching employees beginning July 1, 1989.

These schedules do not include T-DROP members or retirees who returned to work.

DEFERRED VESTED MEMBERS AT JUNE 30, 2011
BY ATTAINED AGE

Age	Number	Estimated Annual Benefits	Contribution Balance
Below 40	1,600	$ 7,415,623	$ 13,310,763
40	288	1,410,693	2,064,854
41	319	1,483,667	1,990,912
42	331	1,615,541	2,076,291
43	380	1,705,220	1,865,707
44	420	1,836,667	2,105,867
45	428	1,843,389	1,987,567
46	503	2,252,102	2,375,568
47	552	2,189,554	2,483,058
48	508	2,154,542	2,476,266
49	545	2,347,627	2,579,481
50	557	2,515,888	3,248,928
51	508	2,397,998	3,383,508
52	577	2,820,789	3,917,600
53	505	2,376,924	3,608,604
54	564	2,835,851	4,750,704
55	533	2,735,687	4,138,714
56	520	2,587,352	4,687,509
57	518	2,761,269	4,588,963
58	494	2,562,542	4,631,149
59	517	2,879,740	5,176,537
60 & Up	1,237	4,537,042	7,313,786
Future Beneficiaries #	35	116,665	0
Totals	**12,439**	**$57,382,372**	**$84,762,336**

 # These are 35 beneficiaries of deceased active members who are eligible for a pension at age 62.

An inactive member is no longer actively working and has sufficient service credit to qualify for a monthly benefit at retirement age.

ALL MEMBERS PARTICIPATING IN T-DROP AT JUNE 30, 2011
BY ATTAINED AGE

Age	Number	Current T-DROP Contribution	Original T-DROP Contribution	T-DROP Account Balance	Pay
47	1	$ 20,381	$ 19,234	$ 19,859	$ 58,290
48	1	4,949	4,669	9,968	47,597
49	9	131,258	125,553	200,871	384,384
50	35	680,855	657,197	821,264	1,924,841
51	105	2,193,383	2,099,308	3,226,533	6,112,021
52	203	4,287,137	4,068,861	7,677,067	11,788,363
53	273	6,080,417	5,692,903	13,941,556	16,363,078
54	363	8,030,344	7,432,531	24,125,263	21,663,200
55	366	8,168,924	7,344,094	30,842,176	21,860,993
56	389	8,864,346	7,907,365	36,538,013	23,598,108
57	444	9,816,974	8,535,417	50,538,960	27,357,711
58	414	8,878,763	7,657,777	51,790,199	24,881,713
59	423	9,013,362	7,994,115	57,581,302	25,929,120
60	357	6,962,754	6,607,418	51,605,838	21,704,730
61	347	6,553,577	6,374,463	48,342,510	20,991,892
62	261	4,510,455	4,679,415	40,745,221	15,954,054
63	202	3,633,203	3,794,148	27,894,101	12,340,074
64	156	2,747,244	2,796,916	21,946,838	9,456,790
65	61	1,312,490	1,079,024	7,217,569	3,620,316
66	23	488,681	398,476	3,095,165	1,287,475
67	21	545,186	423,178	3,944,852	1,458,709
68	16	412,814	286,370	3,021,219	918,495
69	8	159,972	125,437	1,544,214	470,131
70	3	62,636	44,858	468,985	186,615
71	3	69,071	38,996	533,608	138,649
72	1	45,107	21,758	418,065	76,220
73	1	15,782	12,570	131,134	26,960
76	1	45,378	25,299	377,054	68,894
Totals	**4,487**	**$ 93,735,443**	**$ 86,247,350**	**$ 488,599,404**	**$ 270,669,423**

A T-DROP member continues to work, but does not accrue retirement benefits. A reduced benefit is paid into the T-DROP account (see page C-2) during T-DROP participation.

MEMBERS PARTICIPATING IN T-DROP AT JUNE 30, 2011
BY ATTAINED AGE
ENTERING T-DROP BEFORE SEPTEMBER 2003

Age	Number	Current T-DROP Contribution	Original T-DROP Contribution	T-DROP Account Balance	Pay
54	1	$ 15,548	$ 12,690	$ 147,820	$ 83,185
55	1	26,261	20,916	218,207	70,298
56	10	198,806	161,357	1,722,807	568,959
57	63	1,258,043	1,011,575	10,789,744	3,844,912
58	112	2,253,186	1,847,533	20,345,350	6,629,574
59	158	3,177,634	2,803,148	32,715,624	10,255,732
60	161	2,696,301	2,799,842	34,311,973	10,046,827
61	149	2,335,232	2,583,276	32,427,237	9,179,841
62	128	1,913,064	2,344,800	30,792,067	8,569,592
63	81	1,060,246	1,447,126	19,176,480	5,108,249
64	60	927,411	1,143,702	14,627,967	4,072,155
65	19	500,559	330,281	4,269,917	1,266,314
66	7	197,858	133,061	1,879,513	444,712
67	8	274,891	179,512	2,623,991	630,071
68	8	269,526	160,686	2,301,520	493,525
69	5	110,311	83,450	1,246,679	322,392
70	1	26,665	15,809	224,844	48,962
71	2	59,121	31,373	466,405	101,262
72	1	45,107	21,758	418,065	76,220
73	1	15,782	12,570	131,134	26,960
Totals	**977**	**$ 17,406,930**	**$ 17,169,764**	**$ 211,214,398**	**$ 61,908,636**

A full employer contribution is made to ATRS on behalf of these individuals in accordance with Act 992 of 2003 beginning with fiscal year 2010.

MEMBERS PARTICIPATING IN T-DROP AT JUNE 30, 2011
BY ATTAINED AGE
ENTERING T-DROP AFTER AUGUST 2003

Age	Number	Current T-DROP Contribution	Original T-DROP Contribution	T-DROP Account Balance	Pay
47	1	$ 20,381	$ 19,234	$ 19,859	$ 58,290
48	1	4,949	4,669	9,968	47,597
49	9	131,258	125,553	200,871	384,384
50	35	680,855	657,197	821,264	1,924,841
51	105	2,193,383	2,099,308	3,226,533	6,112,021
52	203	4,287,137	4,068,861	7,677,067	11,788,363
53	273	6,080,417	5,692,903	13,941,556	16,363,078
54	362	8,014,796	7,419,841	23,977,443	21,580,015
55	365	8,142,663	7,323,178	30,623,969	21,790,695
56	379	8,665,540	7,746,008	34,815,206	23,029,149
57	381	8,558,931	7,523,842	39,749,216	23,512,799
58	302	6,625,577	5,810,244	31,444,849	18,252,139
59	265	5,835,728	5,190,967	24,865,678	15,673,388
60	196	4,266,453	3,807,576	17,293,865	11,657,903
61	198	4,218,345	3,791,187	15,915,273	11,812,051
62	133	2,597,391	2,334,615	9,953,154	7,384,462
63	121	2,572,957	2,347,022	8,717,621	7,231,825
64	96	1,819,833	1,653,214	7,318,871	5,384,635
65	42	811,931	748,743	2,947,652	2,354,002
66	16	290,823	265,415	1,215,652	842,763
67	13	270,295	243,666	1,320,861	828,638
68	8	143,288	125,684	719,699	424,970
69	3	49,661	41,987	297,535	147,739
70	2	35,971	29,049	244,141	137,653
Totals	**3,510**	**$ 76,328,513**	**$ 69,077,586**	**$ 277,385,006**	**$ 208,760,787**

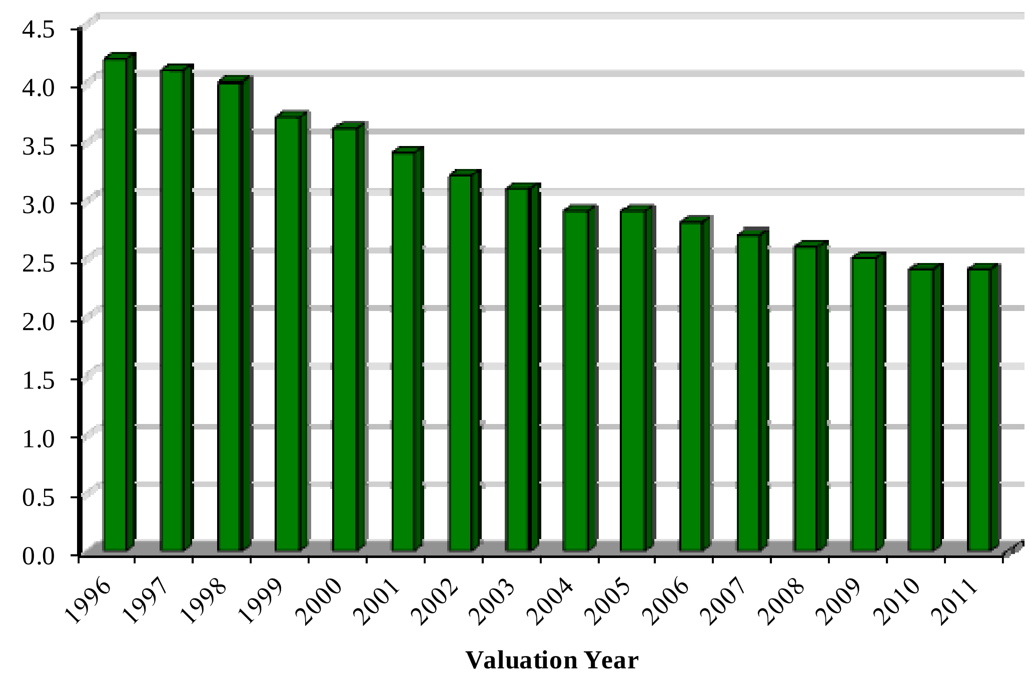
A full employer contribution is made to ATRS on behalf of these individuals in accordance with Act 992 of 2003.

ANNUITIES BEING PAID RETIREES AND BENEFICIARIES JULY 1, 2011
BY TYPE OF ANNUITY BEING PAID

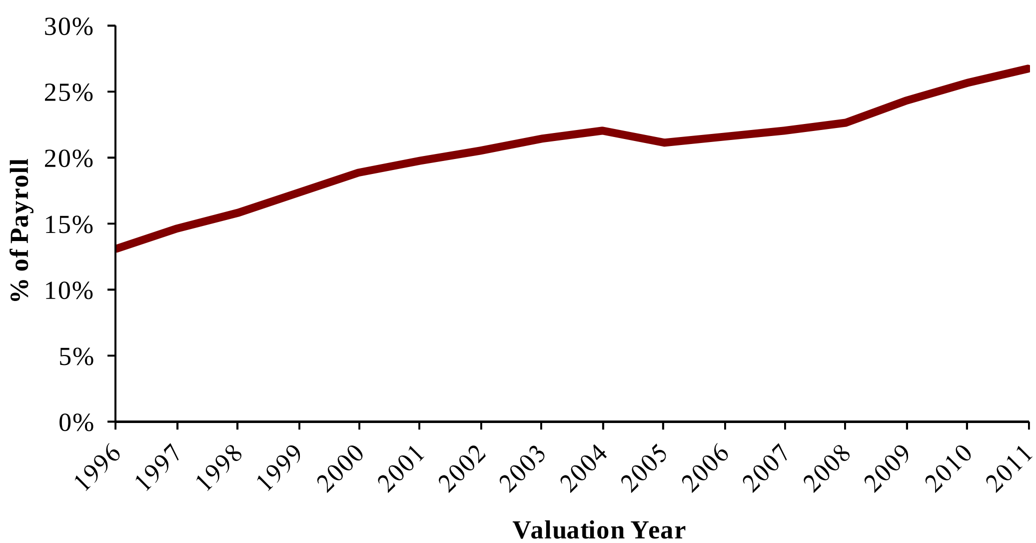
Type of Annuity	No.	Annual Amounts Original Annuities	Base Annuities	Current Annuities
RETIREMENT RESERVE ACCOUNT				
Age & Service				
Option 1 (Basic single life)	22,239	$ 303,973,313	$ 434,009,741	$ 459,397,904
Option A (Joint & 100% Survivor)	3,198	50,761,142	65,349,377	69,151,436
Option B (Joint & 50% Survivor)	1,777	37,038,128	50,338,813	53,303,717
Option C (10 year certain)	714	11,238,692	13,071,507	13,821,541
Beneficiaries	729	10,671,929	12,911,995	13,688,006
Totals	28,657	413,683,204	575,681,433	609,362,604
Disability				
Option 1	1,821	16,005,357	23,007,935	24,341,078
Option A	277	2,763,174	3,445,333	3,636,501
Option B	70	877,863	1,139,470	1,204,169
Option C	74	669,758	717,179	755,073
Beneficiaries	291	2,715,173	3,788,342	4,010,784
Totals	2,533	23,031,325	32,098,259	33,947,605
Act 793	216	1,314,170	2,235,542	2,239,588
Totals	31,406	438,028,699	610,015,234	645,549,797
SURVIVOR'S BENEFIT ACCOUNT				
Beneficiaries of Deceased Members	601	5,015,305	7,193,508	7,605,212
ACT 808				
Act 808	92	1,627,798	3,920,471	3,920,471
RETIREMENT SYSTEM TOTALS				
Total Annuities Being Paid	32,099	$ 444,671,802	$ 621,129,213	$ 657,075,480

The Original Annuity is the annuity at the date of retirement.
The Base Annuity is the amount from which the 3.0% COLA is calculated.
The Current Annuity is the annuity payable at July 1, 2011.

Active Members Per Retired Life *



Retirement Benefits Being Paid as a Percent of Member Payroll *



** Beginning with the June 30, 2011 valuation, active members include TDROP participants and payroll.*

BENEFIT CHANGES DURING RECENT YEARS OF RETIREMENT & RELATED CHANGES IN PURCHASING POWER (1980 $)

Year Ended June 30	Increase Beginning of Year	Benefit Dollars in Year*	Inflation (Loss) in Year#	Purchasing Power at Year End	
				1980 $	% of 1980
1980	- - - -	$ 5,000	- - - -	$ 5,000	100%
1981	$ 75	5,075	(9.6)%	4,632	93%
1982	152	5,227	(7.1)%	4,456	89%
1983	152	5,379	(2.6)%	4,471	89%
1984	431	5,810	(4.2)%	4,633	93%
1985	438	6,248	(3.7)%	4,802	96%
1986	509	6,757	(1.7)%	5,103	102%
1987	197	6,954	(3.7)%	5,067	101%
1988	400	7,354	(3.9)%	5,154	103%
1989	503	7,857	(5.1)%	5,236	105%
1990	497	8,354	(4.7)%	5,319	106%
1991	230	8,584	(4.7)%	5,220	104%
1992	762	9,346	(3.1)%	5,513	110%
1993	792	10,138	(3.0)%	5,806	116%
1994	820	10,958	(2.5)%	6,123	122%
1995	303	11,261	(3.0)%	6,107	122%
1996	303	11,564	(2.8)%	6,103	122%
1997	1,657	13,221	(2.3)%	6,821	136%
1998	1,214	14,435	(1.7)%	7,324	146%
1999	323	14,758	(2.0)%	7,344	147%
2000	1,039	15,797	(3.7)%	7,583	152%
2001	1,220	17,017	(3.2)%	7,907	158%
2002	672	17,689	(1.1)%	8,132	163%
2003	468	18,157	(2.1)%	8,174	163%
2004	468	18,625	(3.3)%	8,120	162%
2005	468	19,093	(2.5)%	8,118	162%
2006	468	19,561	(4.3)%	7,973	159%
2007	468	20,029	(2.7)%	7,950	159%
2008	468	20,497	(5.0)%	7,747	155%
2009	468	20,965	1.4 %	8,038	161%
2010	629	21,594	(1.1)%	8,193	164%
2011	648	22,242	(3.6)%	8,149	163%
2012	648	22,890			

* *The $5,000 benefit used to begin this schedule is an arbitrary amount. A smaller beginning amount would show a smaller purchasing power loss in percent loss.*

\# *Based on Consumer Price Index, All Urban Consumers, United States City Average (June values).*

BENEFIT CHANGES DURING RECENT YEARS OF RETIREMENT & RELATED CHANGES IN PURCHASING POWER (1990 $)

Year Ended June 30	Increase Beginning of Year	Benefit Dollars in Year*	Inflation (Loss) in Year#	Purchasing Power At Year End	
				1990 $	% of 1990
1990	- - - -	$ 5,000	- - - -	$ 5,000	100%
1991	$ 150	5,150	(4.7)%	4,919	98%
1992	457	5,607	(3.1)%	5,195	104%
1993	475	6,082	(3.0)%	5,471	109%
1994	492	6,574	(2.5)%	5,770	115%
1995	182	6,756	(3.0)%	5,755	115%
1996	182	6,938	(2.8)%	5,751	115%
1997	330	7,268	(2.3)%	5,889	118%
1998	667	7,935	(1.7)%	6,324	126%
1999	177	8,112	(2.0)%	6,340	127%
2000	849	8,961	(3.7)%	6,756	135%
2001	826	9,787	(3.2)%	7,143	143%
2002	387	10,174	(1.1)%	7,346	147%
2003	270	10,444	(2.1)%	7,385	148%
2004	270	10,714	(3.3)%	7,337	147%
2005	270	10,984	(2.5)%	7,336	147%
2006	270	11,254	(4.3)%	7,205	144%
2007	270	11,524	(2.7)%	7,185	144%
2008	270	11,794	(5.0)%	7,002	140%
2009	270	12,064	1.4 %	7,265	145%
2010	362	12,426	(1.1)%	7,628	153%
2011	373	12,799	(3.6)%	7,366	147%
2012	373	13,172			

* *The $5,000 benefit used to begin this schedule is an arbitrary amount. A smaller beginning amount would show a smaller purchasing power loss in percent loss.*

\# *Based on Consumer Price Index, All Urban Consumers, United States City Average (June values).*

BENEFIT CHANGES DURING RECENT YEARS OF RETIREMENT & RELATED CHANGES IN PURCHASING POWER (2000 $)

Year Ended June 30	Increase Beginning of Year	Benefit Dollars in Year*	Inflation (Loss) in Year#	Purchasing Power At Year End	
				2000 $	% of 2000
2000	$ - - - -	$ 5,900	- - - -	$5,900	100%
2001	177	6,077	(3.2)%	5,886	100%
2002	252	6,329	(1.1)%	6,065	103%
2003	179	6,508	(2.1)%	6,108	104%
2004	179	6,687	(3.3)%	6,078	103%
2005	179	6,867	(2.5)%	6,086	103%
2006	179	7,046	(4.3)%	5,987	101%
2007	179	7,225	(2.7)%	5,978	101%
2008	179	7,404	(5.0)%	5,834	99%
2009	179	7,583	1.4 %	6,061	103%
2010	228	7,811	(1.1)%	6,363	108%
2011	234	8,045	(3.6)%	6,145	104%
2012	234	8,279			

* *The $5,900 benefit used to begin this schedule is an arbitrary amount. A smaller beginning amount would show a smaller purchasing power loss in percent loss.*

\# *Based on Consumer Price Index, All Urban Consumers, United States City Average (June values).*

SECTION F

FINANCIAL PRINCIPLES

FINANCIAL PRINCIPLES AND OPERATIONAL TECHNIQUES

Promises Made and To Be Paid For. As each year is completed, the System, in effect, hands an "IOU" to each member then acquiring a year of service credit. The "IOU" says: "The Arkansas Teacher Retirement System owes you one year's worth of retirement benefits, payments in cash commencing when you qualify for retirement."

The related ***key financial questions*** are:
Which generation of taxpayers contributes the money to cover the IOU?
The present taxpayers, who receive the benefit of the member's present year of service?
Or the future taxpayers, who happen to be in Arkansas at the time the IOU becomes a cash demand?

The financial objective of the ATRS is that this year's taxpayers contribute the money to cover the IOUs being handed out this year so that ***the employer contribution rate will remain approximately level from generation to generation*** -- our children and our grandchildren will not have to contribute greater percents of pay than we contribute now. This objective was set forth in Act 793 of 1977.

(There are systems which have ***a design for deferring contributions to future <u>taxpayers</u>***, lured by a lower contribution rate now and putting aside the fact that the contribution rate must then relentlessly grow much greater over decades of time -- consume now, and let your children face higher contribution rates after you retire.)

An inevitable byproduct of the level-cost design is the accumulation of reserve assets for decades and the income produced when the assets are invested. ***Investment income*** becomes the ***third and largest contributor*** for benefits to employees, and is interlocked with the contribution amounts required from employees and employers.

Translated to actuarial terminology, this level-cost objective means that the contribution rates must total at least the following:

> Normal Cost (the cost of members' service being rendered this year)
> … plus …
> Interest on Unfunded Actuarial Accrued Liabilities (unfunded accrued liabilities are the difference between (i) liabilities for service already rendered and (ii) the accrued assets of the plan).

Computing Contributions to Support System Benefits. From a given schedule of benefits and from the employee data and asset data furnished, the actuary determines the contribution rates to support the benefits, by means of ***an actuarial valuation***. An actuarial valuation has a number of ingredients such as: the rate of investment income which plan assets will earn; the rates of withdrawal of active members who leave covered employment before qualifying for any monthly benefit; the rates of mortality; the rates of disability; the rates of pay increases; and the assumed age or ages at actual retirement. In an actuarial valuation, assumptions must be made as to what the above rates will be, for the next year and for decades in the future. Only the subsequent actual experience of the System can indicate the degree of accuracy of the assumptions.

Reconciling Differences Between Assumed Experience and Actual Experience. Once actual experience has occurred and been observed, it will not coincide exactly with assumed experience, regardless of the accuracy of the various financial assumptions or the skill of the actuary and the precision of the calculations made. The System copes with these continually changing differences by having annual actuarial valuations. Each actuarial valuation is a complete recalculation of assumed future experience, taking into account all past differences between assumed and actual experience. The result is continual adjustments in financial position.

THE ACTUARIAL VALUATION PROCESS

The financing diagram on the next page shows the relationship between the two fundamentally different philosophies of paying for retirement benefits: the method where contributions match cash benefit payments (or barely exceed cash benefit payments, as in the Federal Social Security program), and is thus an ***increasing contribution method***; and the ***level contribution method*** which equalizes contributions between the generations.

The actuarial valuation is the mathematical process by which the level contribution rate is determined, and the flow of activity constituting the valuation may be summarized as follows:

A. ***Census Data***, furnished by plan administrator
Retired lives now receiving benefits
Former employees with vested benefits not yet payable
Active employees

B. + ***Asset data*** (cash & investments), furnished by plan administrator

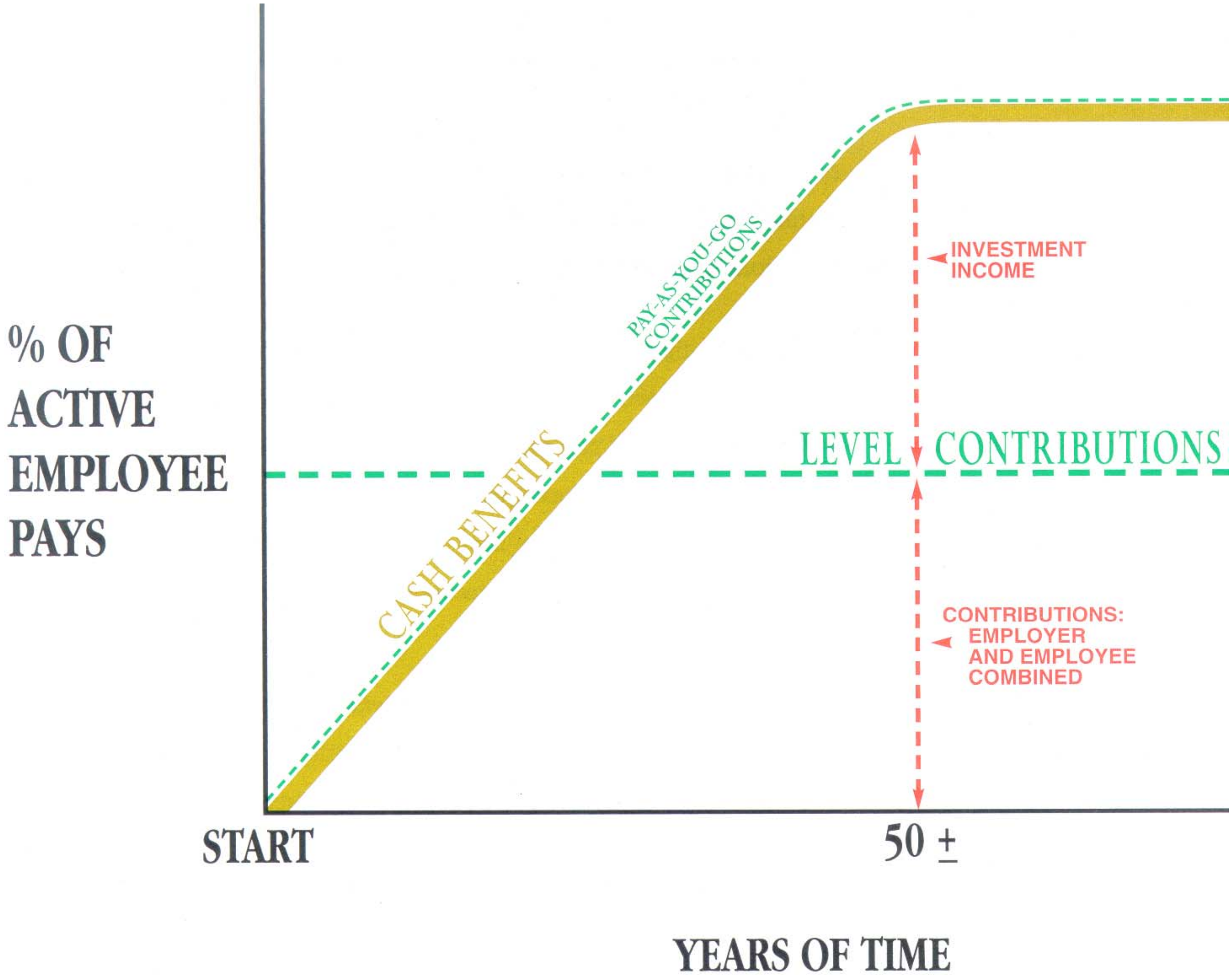
C. + **Benefit provisions** that establish eligibility and amounts of payments to members

D. + ***Assumptions concerning future financial experiences in various risk areas***, which assumptions are established by the Board of Trustees after consulting with the actuary.

E. + ***The funding method*** for employer contributions (the long-term planned pattern for employer contributions)

F. + ***Mathematically combining the assumptions, the funding method, and the data***

G. = Determination of:
Plan financial position, and/or
New Employer Contribution Rate



CASH BENEFITS LINE. This relentlessly increasing line is the fundamental reality of retirement plan financing. It happens each time a new benefit is added for future retirements (and happens regardless of the design for contributing for benefits).

LEVEL CONTRIBUTION LINE. Determining the level contribution line requires detailed assumptions concerning a variety of experiences in future decades, including:

- Economic Risk Areas
    - Rates of investment return
    - Rates of pay increase
    - Changes in active member group size
- Non-Economic Risk Areas
    - Ages at actual retirement
    - Rates of mortality
    - Rates of withdrawal of active members (turnover)
    - Rates of disability

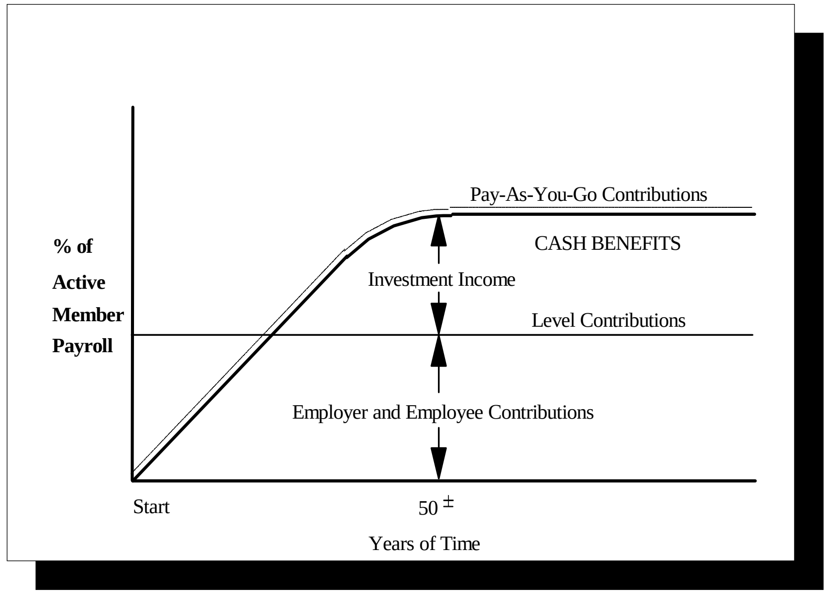
SECTION G

ACTUARIAL ASSUMPTIONS

SELECTION OF ASSUMPTIONS USED IN ACTUARIAL VALUATIONS

Economic Assumptions

Investment return
Pay increases to individual employees:
  the portion for economic changes
Active member group size and
  total payroll growth



Demographic Assumptions

Actual ages at service retirement
Pay increases to individual members:
  the portion for merit & seniority
Disability while actively employed
Separations before retirement
Mortality after retirement
Mortality before retirement

RELATIONSHIP BETWEEN PLAN GOVERNING BODY AND THE ACTUARY

The actuary should have the primary responsibility for choosing the ***demographic*** assumptions used in the actuarial valuation, making use of specialized training and experience.

The actuary and other professionals can provide guidance concerning the choice of suitable economic assumptions, but the basis of the economic assumptions is the assumed rate of ***inflation***, a quantity which defies accurate prediction. Given an assumed rate of future inflation, it is very important that this rate be applied in a consistent manner in deriving the assumed rate of investment return, the economic portion of the assumption on pay increases to individual employees, and the assumed rate of growth of active member payroll. Consistent application of assumptions is an area in which the actuary has specialized training.

A sound procedure is that the actuary suggests reasonable alternatives for economic assumptions, followed by discussion involving the actuary, the Plan Governing Body, and other professionals, and the Plan Governing Body then makes a final choice from the various alternatives.

SUMMARY OF ASSUMPTIONS USED IN ACTUARIAL VALUATIONS FOR THE ARKANSAS TEACHER RETIREMENT SYSTEM ASSUMPTIONS ADOPTED BY BOARD OF TRUSTEES AFTER CONSULTING WITH ACTUARY

Economic Assumptions

The investment return rate used in making the valuation was 8% per year, compounded annually (net after administrative expenses). This rate of return is not the assumed real rate of return. The real rate of return over wage inflation in this valuation is defined to be the portion of investment return which is more than the wage inflation rate. Considering wage inflation recognition of 3.25%, the 8% rate translates to an assumed real rate of return over wage inflation of 4.75%. This rate was first used for the ***June 30, 2011*** valuation. The assumed real rate of return over price inflation would be higher – on the order 5% to 5.25%.

Pay increase assumptions for individual active members are shown on pages G-7 and G-8. Part of the assumption for each age is for a merit and/or seniority increase, and the other 3.25% recognizes wage inflation. These rates were first used for the ***June 30, 2011*** valuation.

No specific ***Price Inflation*** is needed for this valuation. However, the wage inflation and interest rate assumptions would be compatible with a price inflation assumption of 2.75%. It is assumed that the 3% COLA will always be paid.

The Active Member Group size is assumed to remain constant at its present level.

Total active member payroll is assumed to increase 3.25% a year, which is the portion of the individual pay increase assumptions attributable to wage inflation. This rate was first used for the ***June 30, 2011*** valuation.

Non-Economic Assumptions

The mortality table used was the RP-2000 Mortality table for males and females projected 20 years with scale AA. Mortality rates were adjusted to include margin for future mortality improvement as described in the table named above. Related values are shown on page G-4. This table was first used for the ***June 30, 2011*** valuation. For disabled lives, the mortality table used was the 1983 Group Annuity Mortality Table the mortality table set forward 5 years. The set forward of 5 years was first used for the ***June 30, 2002*** valuation.

The probabilities of retirement for members eligible to retire are shown on page G-5 and G-6. The rates for full retirement were first used in the ***June 30, 2011*** valuation. The rates for reduced retirement were first used in the ***June 30, 2002*** valuation.

The probabilities of withdrawal from service, ***death-in-service*** and ***disability*** are shown for sample ages on pages G-7 and G-8. These rates were first used in the ***June 30, 2011*** valuation.

The entry age actuarial cost method of valuation was used in determining accrued liabilities and normal cost.

Differences in the past between assumed experience and actual experience ("actuarial gains and losses") become part of actuarial accrued liabilities.

Unfunded actuarial accrued liabilities are amortized to produce contribution amounts (the total of principal & interest) which are level percents of payroll contributions.

These cost methods were first used in the June 30, 1986 valuation.

Asset Valuation Method. A market value related asset method is used as described on page D-1. This method was first used in the June 30, 1995 valuation. It was modified following the 1997-2002 Experience Study to include an 80% - 120% market value corridor.

The data about persons now covered and about present assets was furnished by the System's administrative staff. Although examined for general reasonableness, the data was not audited by the Actuary. Members whose dates of birth were not supplied were assumed to be 40 years old on the valuation date. Members whose salaries were not supplied and that entered T-DROP before September 2003 were assumed to have the group average pay of $63,366. Those that entered after were assumed to have the group average pay of $59,476.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as: plan experience differing from that anticipated by the economic and demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Due to the limited scope of the actuary's assignment, the actuary did not perform an analysis of the potential range of such future measurements.

SINGLE LIFE RETIREMENT VALUES

Sample Attained Ages	Present Value of $1.00 Monthly for Life		Present Value of $1 Monthly for Life Increasing 3.0% Annually		Future Life Expectancy (years)		Percent Dying within Next Year	
	Men	Women	Men	Women	Men	Women	Men	Women
40	$147.45	$148.74	$192.83	$195.36	43.26	45.92	0.09 %	0.05 %
45	144.24	145.78	186.54	189.56	38.45	41.03	0.11 %	0.08 %
50	139.69	141.63	178.19	181.91	33.65	36.18	0.14 %	0.11 %
55	133.32	135.93	167.29	172.06	28.89	31.39	0.22 %	0.22 %
60	124.93	128.62	153.79	160.06	24.28	26.77	0.45 %	0.45 %
65	114.53	119.62	137.94	146.03	19.92	22.41	0.90 %	0.86 %
70	102.19	109.01	120.09	130.24	15.89	18.36	1.52 %	1.48 %
75	87.25	96.62	99.84	112.72	12.15	14.64	2.66 %	2.30 %
80	70.65	82.27	78.66	93.60	8.86	11.25	5.01 %	3.85 %
85	54.64	66.59	59.29	73.90	6.25	8.29	9.29 %	6.66 %
Ref:	472 x 0.95	473 x 0.87	472 x 0.95	473 x 0.87				

Sample Attained Ages	Benefit Increasing 3.0% Yearly	Portion of Age 60 Lives Still Alive	
		Men	Women
60	$100.00	100%	100%
65	115.00	97%	97%
70	130.00	92%	93%
75	145.00	84%	86%
80	160.00	71%	76%
Ref		472 x 0.95	473 x 0.87

PROBABILITIES OF RETIREMENT FOR MEMBERS

Retirement Ages	% of Active Participants Retiring with Unreduced Benefits			
	Education		Support	
	Male	Female	Male	Female
48	59%	55%	25%	25%
49	67%	25%	54%	22%
50	11%	7%	3%	9%
51	7%	6%	5%	7%
52	7%	6%	8%	7%
53	7%	8%	9%	8%
54	8%	8%	9%	8%
55	9%	9%	6%	10%
56	11%	10%	10%	9%
57	11%	12%	10%	10%
58	11%	12%	16%	14%
59	14%	16%	16%	27%
60	16%	16%	11%	13%
61	15%	15%	10%	14%
62	30%	26%	29%	22%
63	24%	22%	21%	18%
64	22%	20%	25%	20%
65	37%	43%	46%	40%
66	43%	41%	38%	36%
67	35%	34%	37%	35%
68	31%	33%	39%	28%
69	25%	33%	26%	34%
70	37%	40%	33%	34%
71	41%	30%	34%	33%
72	32%	34%	41%	31%
73	44%	36%	32%	34%
74	30%	30%	29%	34%
75	100%	100%	100%	100%
Ref	2013	2014	2015	2016

These rates are based upon data presented in the 2005-2010 experience study and were first used in the 2011 valuation.

Retirement Ages	% of Active Participants Retiring with Reduced Benefits			
	Education		Support	
	Male	Female	Male	Female
50	2%	2%	2%	2%
51	2%	2%	2%	2%
52	3%	3%	3%	3%
53	4%	4%	4%	4%
54	4%	4%	4%	4%
55	6%	6%	6%	6%
56	9%	5%	9%	5%
57	9%	5%	9%	5%
58	9%	5%	9%	5%
59	9%	5%	9%	5%
Ref	826	825	826	825

DURATION OF T-DROP FOR MEMBERS

Present T-DROP members are assumed to remain in T-DROP according to the following table:

Entry Age	Assumed Duration Years
50-56	6
57	5
58	4
59+	3

Future retirees are assumed to have entered T-DROP at the time that is to their greatest financial advantage based on the schedule above.

TEACHERS
SEPARATIONS FROM ACTIVE EMPLOYMENT BEFORE AGE AND SERVICE RETIREMENT & INDIVIDUAL PAY INCREASES

Sample Ages	Service	Percent of Active Members Separating Within the Next Year					
		Death		Disability		Other	
		Men	Women	Men	Women	Men	Women
	0					25.30%	18.00%
	1					13.80%	11.30%
	2					10.60%	9.10%
	3					8.40%	8.40%
	4					5.00%	6.60%
25	5 & Up	0.01%	0.01%	0.05%	0.05%	3.50%	4.00%
30		0.02%	0.01%	0.05%	0.04%	3.60%	4.30%
35		0.03%	0.02%	0.04%	0.05%	2.80%	2.90%
40		0.04%	0.02%	0.08%	0.09%	2.30%	2.10%
45		0.05%	0.03%	0.18%	0.16%	1.90%	1.80%
50		0.07%	0.05%	0.40%	0.39%	2.90%	2.20%
55		0.11%	0.10%	0.73%	0.69%	3.60%	2.60%
60		0.22%	0.20%	0.96%	0.86%	3.10%	2.30%
65		0.43%	0.38%	1.00%	0.90%	2.50%	1.80%
Ref:		472 x 0.48	473 x 0.44	737 x 1	738 x 1	718 1192	719 1193

Age	Pay Increase Assumptions for an Individual Member		
	Merit & Seniority	Base (Economic)	Increase Next Year
20	5.10%	3.25%	8.35%
25	4.10%	3.25%	7.35%
30	3.10%	3.25%	6.35%
35	2.10%	3.25%	5.35%
40	1.40%	3.25%	4.65%
45	0.90%	3.25%	4.15%
50	0.46%	3.25%	3.71%
55	0.12%	3.25%	3.37%
60	0.00%	3.25%	3.25%
65	0.00%	3.25%	3.25%
Ref:	388		

SUPPORT EMPLOYEES
SEPARATIONS FROM ACTIVE EMPLOYMENT BEFORE AGE AND SERVICE RETIREMENT & INDIVIDUAL PAY INCREASES

Sample Ages	Service	Percent of Active Members Separating Within the Next Year					
		Death		Disability		Other	
		Men	Women	Men	Women	Men	Women
	0					47.50%	46.80%
	1					27.30%	24.90%
	2					18.90%	17.00%
	3					15.30%	13.20%
	4					10.80%	10.40%
25	5 & Up	0.01%	0.01%	0.05%	0.04%	11.10%	9.50%
30		0.02%	0.01%	0.10%	0.05%	9.00%	7.20%
35		0.03%	0.02%	0.10%	0.05%	6.90%	5.40%
40		0.04%	0.02%	0.12%	0.07%	5.40%	4.90%
45		0.05%	0.03%	0.20%	0.16%	4.30%	4.40%
50		0.07%	0.05%	0.55%	0.34%	3.90%	3.60%
55		0.11%	0.10%	0.88%	0.59%	3.50%	3.00%
60		0.22%	0.20%	0.98%	0.76%	2.80%	2.50%
65		0.43%	0.38%	1.00%	0.80%	2.30%	2.00%
Ref:		472 x 0.48	473 x 0.44	739 x 1	740 x 1	720 1194	721 1195

Age	Pay Increase Assumptions for an Individual Member		
	Merit & Seniority	Base (Economic)	Increase Next Year
20	5.85%	3.25%	9.10%
25	4.97%	3.25%	8.22%
30	3.93%	3.25%	7.18%
35	3.33%	3.25%	6.58%
40	2.65%	3.25%	5.90%
45	1.29%	3.25%	4.54%
50	0.35%	3.25%	3.60%
55	0.00%	3.25%	3.25%
60	0.00%	3.25%	3.25%
65	0.00%	3.25%	3.25%
Ref:	389		

MISCELLANEOUS AND TECHNICAL ASSUMPTIONS
JUNE 30, 2011

Marriage Assumption:	100% of males and 100% of females are assumed to be married for purposes of death-in-service benefits. Male spouses are assumed to be three years older than female spouses.
Pay Increase Timing:	Beginning of (Fiscal) year. This is equivalent to assuming that reported pays represent amounts paid to members during the year ended on the valuation date.
Decrement Timing:	Decrements are assumed to occur mid-year, with the exception of normal and early retirement which are assumed to occur at the beginning of the year.
Eligibility Testing:	Eligibility for benefits is determined based upon the age nearest birthday and the service nearest whole year on the date of the valuation.
Decrement Relativity:	Decrement rates are used directly from the experience study, without adjustment for multiple decrement table effects.
Decrement Operation:	Disability does not operate during the first 5 years of service. Disability and turnover do not operate during retirement eligibility.
Normal Form of Benefit:	The assumed normal form of benefit is the straight life form.
Incidence of Contributions:	Contributions are assumed to be received continuously throughout the year based upon the computed percent of payroll shown in this report, and the actual payroll payable at the time contributions are made. The payroll used for this purpose is payroll for all active members plus payroll for members who entered T-DROP on or after September 2003.
Approximations:	Adjustments were made to liabilities for T-DROP to allow for interest accumulation at 2% below the assumed rate of return and to reflect partial employer contributions for people who entered T-DROP prior to September 2003.
Loads:	A 0.25% load was included to account for subsidized Options, Service Purchases, etc.

SECTION H

GLOSSARY

GLOSSARY

Accrued Service. The service credited under the plan which was rendered before the date of the actuarial valuation.

Accumulated Benefit Obligation. The actuarial present value of vested and non-vested benefits based on service to date and past and current salary levels.

Actuarial Accrued Liability. The difference between (i) the actuarial present value of future plan benefits, and (ii) the actuarial present value of future normal cost. Sometimes referred to as "accrued liability" or "past service liability."

Actuarial Assumptions. Estimates of future plan experience with respect to rates of mortality, disability, turnover, retirement, rate or rates of investment income and salary increases. Decrement assumptions (rates of mortality, disability, turnover and retirement) are generally based on past experience, often modified for projected changes in conditions. Economic assumptions (salary increases and investment income) consist of an underlying rate in an inflation-free environment plus a provision for a long-term average rate of inflation.

Actuarial Cost Method. A mathematical budgeting procedure for allocating the dollar amount of the "actuarial present value of future plan benefits" between the actuarial present value of future normal cost and the actuarial accrued liability. Sometimes referred to as the "actuarial funding method."

Actuarial Equivalent. A single amount or series of amounts of equal value to another single amount or series of amounts, computed on the basis of the rate(s) of interest and mortality tables used by the plan.

Actuarial Present Value. The amount of funds presently required to provide a payment or series of payments in the future. It is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Actuarial Present Value of Credited Projected Benefits or Pension Benefit Obligation. The present value of future benefits based on service to date and the effect projected salary increases.

Actuary. A person who is trained in the applications of probability and compound interest to solve problems in business and finance that involve payment of money in the future, contingent upon the occurrence of future events. Most actuaries in the United States are Members of the American Academy of Actuaries. The Society of Actuaries is an international research, education and membership organization for actuaries in the life and health insurance, employee benefits, and pension fields. It administers a series of examinations leading initially to Associateship and the designation A.S.A. and ultimately to Fellowship with the designation F.S.A. The federal government certifies actuaries to practice under ERISA with the designation of E.A.

Amortization. Paying off an interest-bearing liability by means of periodic payments of interest and principal, as opposed to paying it off with a lump sum payment.

Experience Gain (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, in accordance with the actuarial cost method being used.

Normal Cost. The annual cost assigned, under the actuarial funding method, to current and subsequent plan years. Sometimes referred to as "current service cost." Any payment toward the unfunded actuarial accrued liability is not part of the normal cost.

Plan Termination Liability. The actuarial present value of future plan benefits based on the assumption that there will be no further accruals for future service and salary. The termination liability will generally be less than the liabilities computed on a "going concern" basis and is not normally determined in a routine actuarial valuation.

Reserve Account. An account used to indicate that funds have been set aside for a specific purpose and are not generally available for other uses.

Unfunded Actuarial Accrued Liability. The difference between the actuarial accrued liability and valuation assets. Sometimes referred to as "unfunded accrued liability."

Valuation Assets. The value of current plan assets recognized for valuation purposes. Generally based on book value plus a portion of unrealized appreciation or depreciation.