ARKANSAS TEACHER RETIREMENT SYSTEM

Annual Actuarial Valuation of Active and Inactive Members

June 30, 2005

GRS

Gabriel Roeder Smith & Company

REPORT OF THE JUNE 30, 2005 ACTUARIAL VALUATION
OUTLINE OF CONTENTS

January 9, 2006

Board of Trustees
Arkansas Teacher Retirement System
Little Rock, Arkansas

The results of the annual actuarial valuation of non-retired members as of June 30, 2005 are presented in this report. This valuation is based upon the Arkansas Teacher Retirement System laws, as described in Section C of this report.

The census and financial operations data necessary for the actuarial valuation were furnished by the Retirement System. Preparation of this data requires considerable staff time. The helpful cooperation of the Executive Director and his staff in furnishing the data is acknowledged with appreciation.

Liabilities Covering Retirees and Beneficiaries. The June 30^{th} 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 actuarial assumptions used in the actuarial valuation are summarized in the Appendix of this report. These assumptions reflect experience during the period July 1, 1997 to June 30, 2002. The retirement rates were revised slightly to permit use of additional data provided by ATRS.

The annual required contribution for GASB purposes, which will also appear in the System's CAFR, was determined to be 14.70% of payroll. Please note this rate differs from the rate shown on page B-2 of this report.

The valuation was completed using generally accepted actuarial principles and in accordance with standards of practice prescribed by the Actuarial Standards Board. To the best of our knowledge, this report is complete and accurate and the methods and assumptions produced results which are reasonable.

Respectfully submitted,

Brian B. Murphy, FSA, MAAA   Judith A. Kermans, EA, MAAA

BBM/lz

COMMENTS

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, 2005 actuarial valuations, ***ATRS is satisfying the financial objective of level-contribution-percent financing.***

Market investment experience for the year ending June 30, 2005 was favorable. The amortization period this year is 38 years, an increase from last year's 31-year period. However, the increase to 38 years is actually a smaller increase than had been expected, based upon information that was known last year. Consequently, we view the result as favorable.

Since the previous actuarial valuation, there were two changes to benefit provisions.

1) When computing the Final Average Salary, no salary paid in any year, which is utilized in the computation of the members' final average salary, shall exceed 110% of the salary earned in the preceding year.
2) All non-contributory members whose status changes from support to teacher (contracted for more than 181 days), will become contributory.

The first change was designed to limit benefits for members who experience significant salary increases shortly before retirement. This change did not have an impact on this year's valuation results since such salary increases are assumed not to occur. In the long run however, such a change helps to ensure that a proper relationship exists between working pay and retirement income.

The second change also had no impact on short-term valuation results but it will help in the long-term by gradually increasing the percentage of members contributing to the system.

The Arkansas Teacher Retirement System is 80.4% funded as of June 30, 2005, indicating a solid financial position and significant progress in recovering from one of the worst investment markets since the Great Depression. Unfortunately, ATRS still does not have the assets it would have had if the investment markets had performed better in the 2000 to 2003 period. An increase in the employer contribution rate to the 15% of payroll area will be needed to return the amortization period to 30 years.

BENEFIT CHANGES DURING RECENT YEARS OF RETIREMENT & RELATED CHANGES IN PURCHASING POWER (1970 $)

Year Ended June 30	Increase Beginning of Year	Benefit Dollars in Year*	Inflation (Loss) in Year#	Purchasing Power at Year End	
				1970 $	% of 1970
1970	- - - -	$ 5,000	- - - -	$5,000	100%
1971	$ 75	5,075	(4.5)%	4,850	97%
1972	75	5,150	(2.9)%	4,792	96%
1973	75	5,225	(5.9)%	4,587	92%
1974	1,015	6,240	(11.0)%	4,941	99%
1975	474	6,714	(9.3)%	4,860	97%
1976	886	7,600	(5.9)%	5,192	104%
1977	114	7,714	(6.9)%	4,931	99%
1978	114	7,828	(7.4)%	4,658	93%
1979	114	7,942	(10.9)%	4,262	85%
1980	417	8,359	(14.3)%	3,922	79%
1981	118	8,477	(9.6)%	3,630	73%
1982	323	8,800	(7.1)%	3,520	70%
1983	253	9,053	(2.6)%	3,530	71%
1984	725	9,778	(4.2)%	3,658	73%
1985	738	10,516	(3.7)%	3,792	76%
1986	857	11,373	(1.7)%	4,030	81%
1987	331	11,704	(3.7)%	4,001	80%
1988	673+	12,377	(3.9)%	4,070	81%
1989	847	13,224	(5.1)%	4,134	83%
1990	837	14,061	(4.7)%	4,200	84%
1991	388	14,449	(4.7)%	4,122	82%
1992	1,282	15,731	(3.1)%	4,354	87%
1993	1,333	17,064	(3.0)%	4,585	92%
1994	1,380	18,444	(2.5)%	4,835	97%
1995	510	18,954	(3.0)%	4,822	96%
1996	510	19,464	(2.8)%	4,819	96%
1997	3,591	23,055	(2.3)%	5,580	112%
1998	857	23,912	(1.7)%	5,692	114%
1999	2,002	25,914	(2.0)%	6,050	121%
2000	1,358	27,272	(3.7)%	6,141	123%
2001	1,881	29,153	(3.2)%	6,355	127%
2002	1,151	30,304	(1.1)%	6,536	131%
2003	801	31,105	(2.1)%	6,570	131%
2004	801	31,906	(3.3)%	6,526	131%
2005	801	32,707	(2.5)%	6,525	130%
2006	801	33,508			

* *The $5,000 benefit used to begin this schedule is an arbitrary amount. A smaller beginning amount (the 1970 average was less) would show a smaller purchasing power loss, in percent loss.*

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

\+ *For members retired in 1972 & later (members retired in 1970 received a larger percentage increase).*

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			

* *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			

* *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)*

SECTION A

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 ***3rd 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

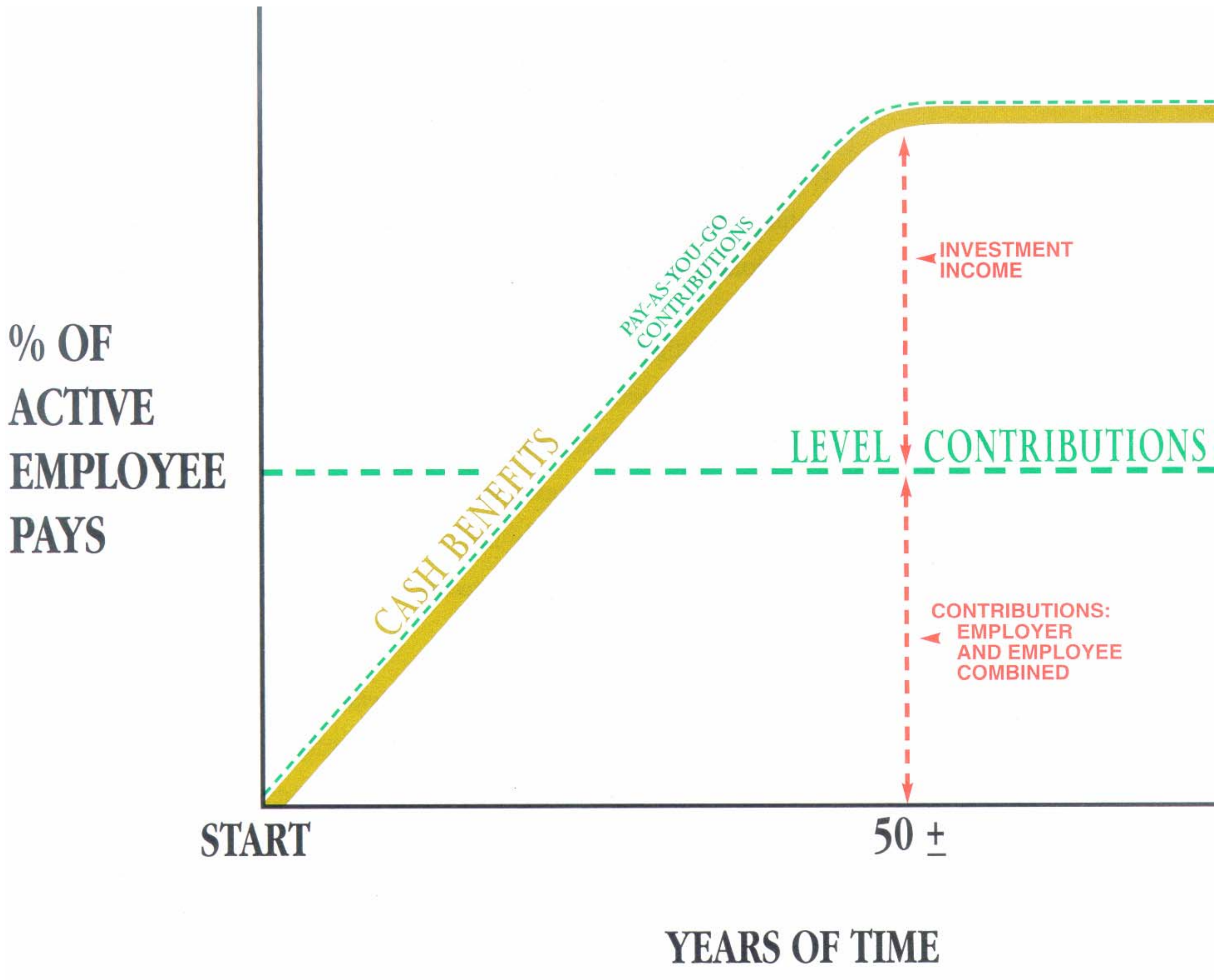
C. + **Benefit provisions** that establish eligibility and amounts of payments to members

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).

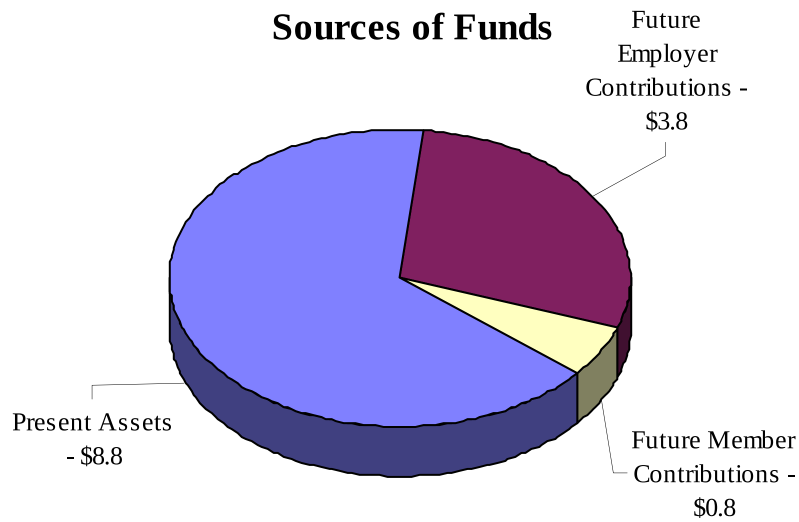
LEVEL CONTRIBUTION LINE. Determining the level contribution line requires detailed assumptions concerning a variety of experiences in future decades, including:

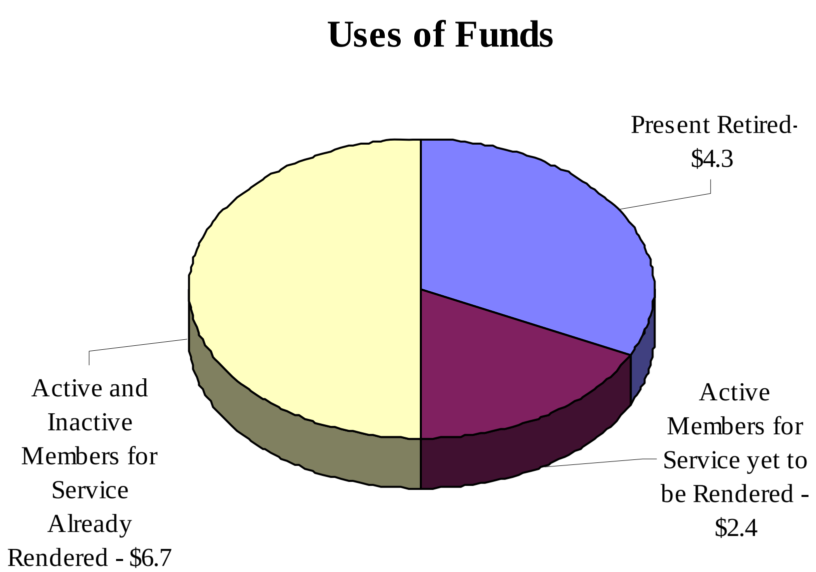
- Economic Risk Areas
  - Rates of investment return
  - Rates of pay increase
  - Changes in active member group size
- Non-Economic Risk Areas
  - Ages at actual retirement
  - Rates of mortality
  - Rates of withdrawal of active members (turnover)
  - Rates of disability

SECTION B

Results of Valuation

FINANCING $13.4 BILLION* OF BENEFIT PROMISES FOR PRESENT ACTIVE AND RETIRED MEMBERS JUNE 30, 2005





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

EMPLOYER CONTRIBUTION RATE COMPUTED AS OF JUNE 30, 2005
FOR THE FISCAL YEAR BEGINNING JULY 1, 2006

	Percents of Active Member Full Payroll			
Computed Contributions for	**Teachers**	**Support**	**Combined**	**Prior Year**
Normal Cost				
Age & Service Annuities	10.53%	8.68%	**10.02%**	10.05%
Deferred Annuities	1.32%	1.75%	**1.44%**	1.62%
Survivor Benefits	0.30%	0.27%	**0.29%**	0.24%
Disability Benefits	0.63%	0.56%	**0.61%**	0.64%
Refunds of Member Contributions	0.32%	0.58%	**0.39%**	0.40%
Total	13.10%	11.84%	**12.75%**	12.95%
Average Member Contributions	4.36%	3.03%	**3.99%**	3.93%
Net Employer Normal Cost	8.74%	8.81%	**8.76%**	9.02%
Unfunded Actuarial Accrued Liabilities			**5.24%**	4.98%
Employer Contribution Rate			**14.00%**	14.00%
Amortization Years			**38.0**	31.0

The length of an amortization period is a matter of judgment, not a matter of solving an algebraic equation. No one amortization period is "correct" --- there is a range of reasonable judgment. In its pursuit of level-percent contributions, the Teacher Retirement System has used a variety of amortization periods from time to time, extending to 40 years on occasions. Market investment experience was favorable this year for ATRS. However, as additional unrealized investment losses flow into the valuation over the next year, the amortization period is likely to increase.

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	Amount	% Change	Value	%Change	Computed Financing Period	Total Employer Rate
1996	56,100	$1,260	$22,463	7.2 %	156.7	2.8 %	16	12.0 %
1997#	56,997	1,302	22,847	1.7 %	160.3	2.3 %	13	12.0 %
1998#*&	58,528	1,368	23,380	2.3 %	163.0	1.7 %	12	12.0 %
1999#	59,499	1,429	24,019	2.7 %	166.2	2.0 %	4	12.0 %
2000#!	60,147	1,485	24,696	2.8 %	172.4	3.7 %	30	12.0 %
2001	61,389	1,557	25,365	2.7 %	178.0	3.2 %	125	12.0 %
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 %

* *Revised financial assumptions.*
\# *Legislated benefit or contribution rate changes.*
& *Revised decrement assumptions.*
! *Benefit increases proposed for 2001 and assuming 8% investment return for Fiscal Year Ended 6/30/2001.*

In the Arkansas Teacher Retirement System, the Change in Average Annual Pay statistic has been affected by the influx of new non-teaching support employees. This influx has been a contributing factor to the growth of the active member population in recent years.

LIABILITIES FOR ANNUITIES BEING PAID JULY 1, 2005
TABULATED BY TYPE OF ANNUITY BEING PAID

Type of Annuity	Liabilities July 1, 2005* Men	Women	Totals
RETIREMENT RESERVE ACCOUNT			
Age & Service Annuities			
Option 1 (Straight Life)	$ 638,224,410	$2,220,079,267	$2,858,303,677
Option A (100% Joint & Survivor)	271,757,625	170,414,528	442,172,153
Option B (50% Joint & Survivor)	186,517,875	165,057,783	351,575,658
Option C (10 Years Certain & Life)	35,037,767	75,709,144	110,746,911
Beneficiaries	12,538,003	52,453,121	64,991,124
Total Age & Service	1,144,075,680	2,683,713,843	3,827,789,523
Disability Annuities			
Option 1	32,308,135	157,688,362	189,996,497
Option A	15,383,303	17,713,526	33,096,829
Option B	3,731,930	5,975,625	9,707,555
Option C	1,494,666	5,833,542	7,328,208
Beneficiaries	12,288,544	17,155,918	29,444,462
Total Disability	65,206,578	204,366,973	269,573,551
Act 793			17,864,466
Total Retirement Reserve Account			4,115,227,540
SURVIVORS' BENEFIT ACCOUNT			
Beneficiaries of Deceased Members	$ 20,871,536	$ 35,386,209	$ 56,257,745
OTHER LIABILITIES			
Act 808			32,859,476
RETIREMENT SYSTEM TOTALS			
Total Annuity Liabilities			$4,204,344,761

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

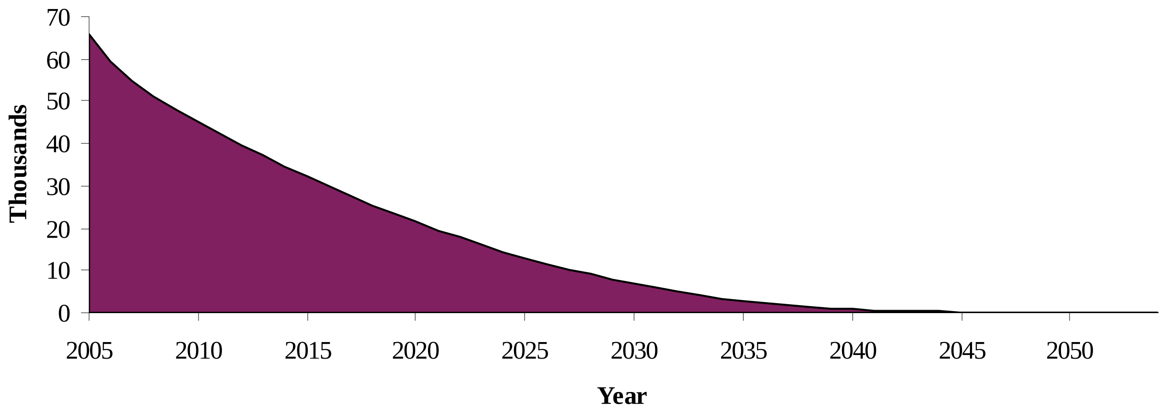
COMPUTED ACTUARIAL LIABILITIES
AS OF JUNE 30, 2005

Actuarial Present Value of	(1) Total Present Value	Entry Age Actuarial Cost Method (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.	$ 6,171,578,795	$1,881,340,052	$ 4,290,238,743
Age and service retirement allowances based on total service likely to be rendered by present T-DROP members.	1,933,861,540	19,454,614	1,914,406,926
Vested Deferred Benefits likely to be paid present active and inactive members.	670,812,394	279,204,732	391,607,662
Survivor benefits expected to be paid on behalf of present active members.	128,067,337	54,603,068	73,464,269
Disability Benefits expected to be paid on behalf of present active members.	199,529,630	113,970,993	85,558,637
Refunds of Member contributions expected to be paid on behalf of Present active members.	13,365,374	71,757,946	(58,392,572)
Benefits payable to present retirees and beneficiaries.	4,204,344,761	0	4,204,344,761
Lump Sum Death benefits payable to present retirees and beneficiaries.	71,315,303	0	71,315,303
Total	$13,392,875,134	$2,420,331,405	$10,972,543,729
Applicable Assets	8,817,254,313	0	8,817,254,313
Liabilities to be Covered by Future Contributions	$ 4,575,620,821	$2,420,331,405	$ 2,155,289,416

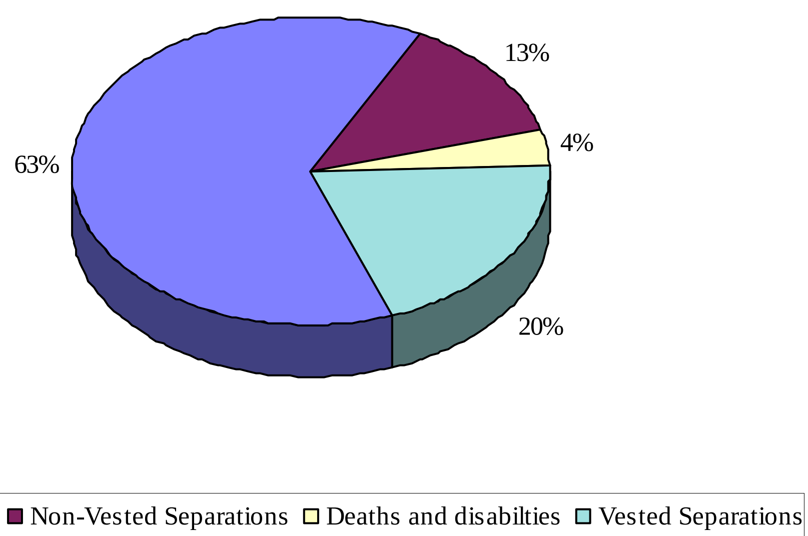
T-DROP liabilities account for 17.4% of the System's total actuarial accrued liabilities.

EXPECTED DEVELOPMENT OF PRESENT POPULATION
JUNE 30, 2005

Closed Group Population Projection

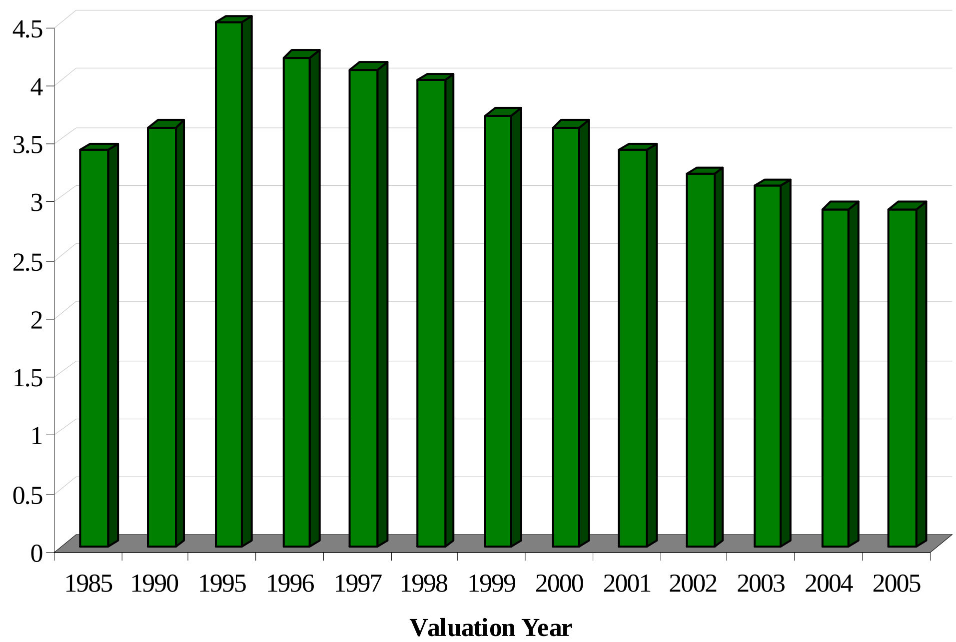


Closed Group Population Projection

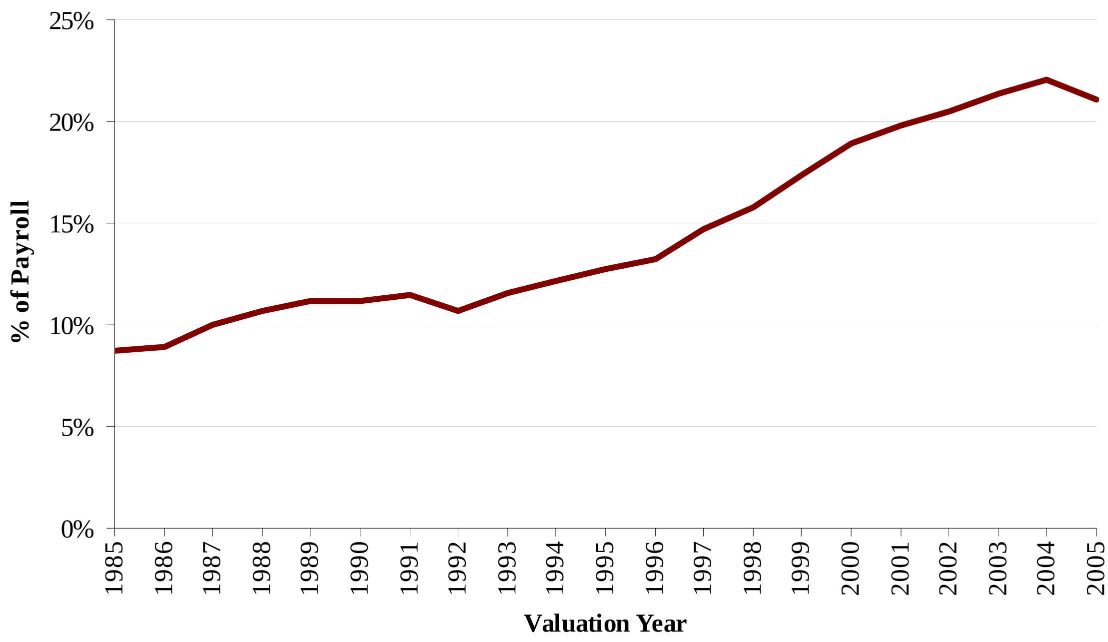


The charts show the expected future development of the present population in simplified terms. The retirement system presently covers 65,793 active members. Eventually, 13% of the population is expected to terminate covered employment prior to retirement and forfeit eligibility for an employer provided benefit. Approximately 83% of the present population is expected to receive monthly retirement benefits either by retiring directly from active service, retiring from T-DROP, or retiring from vested deferred status. 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.

Active Members Per Retired Life



Retirement Benefits Being Paid as a Percent of Member Payroll



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 TRS 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-------------						
1991#*	$ 344	$ 985	$1,433	$ 2,434	100%	100%	77%	88%
1992#	367	1,077	1,885	2,729	100%	100%	68%	82%
1993#	388	1,207	2,117	3,051	100%	100%	69%	82%
1994	403	1,334	2,223	3,307	100%	100%	71%	84%
1995*	415	1,488	2,354	3,626	100%	100%	73%	85%
1996	424	1,634	2,577	4,186	100%	100%	83%	90%
1997#	426	1,918	3,059	4,956	100%	100%	85%	92%
1998#	435	2,173	3,553	5,815	100%	100%	90%	94%
1999#	447	2,566	3,821	6,740	100%	100%	98%	99%
2000	454	2,804	4,322	7,620	100%	100%	101%	101%
2000#	454	2,888	4,537	7,620	100%	100%	94%	97%
2001#	470	3,200	4,891	8,166	100%	100%	92%	95%
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%

* *Revised actuarial assumptions or methods.*

\# *Legislated benefit and contribution rate change.*

SECTION C

Summary of Benefits

SUMMARY OF PROVISIONS
JUNE 30, 2005

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.

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 7/1/05, no salary paid in any year which is utilized in the computation of the members' final average salary, shall exceed 110% of the salary earned in the preceding year.

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 5 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 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 and interest 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. Upon actual retirement the member may receive the T-DROP account balance in the form of a lump sum or as an additional annuity.

9. **Post-Retirement Increases.** Each July 1, every member's annuity is 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 April 1, 1997 or the effective date of retirement, as redetermined by Acts 396 and 992.

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 his 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 20 years of credited service regardless of age, the annuity begins immediately; or, if the member has acquired 15 years of credited service but has not attained age 60, the annuity begins when the spouse is 50; otherwise the annuity begins at age 62. The spouse's annuity cannot be less than the greater of (i) 10% of the deceased member's covered salary at time of death or (ii) $50 monthly. 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 of the greater of (i) 10% of covered salary at the time of death or (ii) $50 monthly; provided, that if there are 3 or more dependent children, each receives an annuity of an equal share of the greater of (i) 25% of covered salary at time of death or (ii) $125 monthly. 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).

(c) If there is neither a spouse nor a dependent child at the time of the member's death, each dependent parent receives an allowance of the greater of (i) 10% of covered salary or (ii) $50 monthly.

(d) Survivor benefits based on both contributory and non-contributory service will be prorated between contributory benefits and non-contributory benefits.

11. **Lump Sum Death Benefit.** Beneficiaries of deceased active members or retirees with 5 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 is prorated). In addition, each dependent child of a deceased member with 5 or more years of ATRS credited service is eligible to receive a lump sum death benefit of $10,000.

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 6% annually. Effective July 1, 1993, a non-contributory plan was created and 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 7/1/1999 the default choice for new members is contributory. All current members had until 7/1/2000 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 7/1/2005, all non-contributory members whose status changes from support to teacher (contracted for more than 181 days), will become contributory.

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.

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.

15. **Retiree Health Stipend.** Each retired member 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.

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.

SAMPLE BENEFIT COMPUTATIONS FOR A MEMBER RETIRING JUNE 30, 2005

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 Amount
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.	Total Benefit: G + H		22,750
J.	Adjustment for Line F election:		
	(1 - 0.83037) x I		3,859
K.	Annual Amount Payable		$18,891

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

Year Ended June 30	**Amount Paid**
2006	$18,891
2007	19,458
2008	20,025
2009	20,592
2010	21,159

Thereafter, the amount would increase by $567 annually for life.

SAMPLE T-DROP BENEFIT COMPUTATIONS FOR A MEMBER ENTERING T-DROP JUNE 30, 2005

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)	2,528
I.	Annual Amount Payable E + F – G – H	$12,642

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

Year Ended June 30	**Amount Deposited**
2006	$12,642
2007	13,021
2008	13,400
2009	13,779
2010	14,158
Total	67,000

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

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-2), 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 shown below:

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%

This year, the actuarial value of assets exceeds the market value by less than 1%. 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-2).

DEVELOPMENT OF FUNDING VALUE OF ASSETS

Year Ended June 30:	2003	2004	2005	2006	2007	2008
A. Funding Value Beginning of Year	$ 8,328,451,257	$ 8,113,258,915	$ 8,423,579,265			
B. Market Value End of Year	7,050,355,544	8,122,004,035	8,811,146,753			
C. Market Value Beginning of Year	7,084,325,012	7,050,355,544	8,122,004,035			
D. Non-Investment Net Cash Flow	(109,466,730)	(115,495,107)	(83,846,072)			
E. Investment Return						
E1. Market Total: B - C - D	75,497,262	1,187,143,598	772,988,790			
E2. Amount for Immediate Recognition (8%)	661,897,431	644,440,909	670,532,498			
E3. Amount for Phased-In Recognition: E1-E2	(586,400,169)	542,702,689	102,456,292			
F. Phased-In Recognition of Investment Return						
F1. Current Year: 0.25 x E3	(146,600,042)	135,675,672	25,614,073	Unknown	Unknown	Unknown
F2. First Prior Year	(278,403,354)	(354,301,124)	135,675,672	$ 25,614,073	Unknown	Unknown
F3. Second Prior Year	(216,296,533)		(354,301,124)	135,675,672	$ 25,614,073	Unknown
F4. Third Prior Year	23,676,886			(354,301,124)	135,675,673	$ 25,614,073
F5. Accelerated Market Value Recognition	(150,000,000)					
F6. Total Recognized Investment Gain	**(767,623,043)**	**(218,625,452)**	**(193,011,379)**	**(193,011,379)**	**161,289,746**	**25,614,073**
G. Funding Value End of Year:						
G1. Preliminary Funding Value End of Year: A+D+E2+F6	**8,113,258,915**	**8,423,579,265**	**8,817,254,313**			
G2. Upper Corridor Limit: 120% x B	**8,460,426,653**	**9,746,404,842**	**10,573,376,104**			
G3. Lower Corridor Limit: 80% x B	**5,640,284,435**	**6,497,603,228**	**7,048,917,402**			
G4. Funding Value End of Year	**8,113,258,915**	**8,423,579,265**	**8,817,254,313**			
H. Actual/Projected Difference between Market and Funding Value	(1,062,903,371)	(301,575,230)	(6,107,560)	186,903,819	25,614,073	0
I. Market Rate of Return	1.07 %	16.98 %	9.57 %			
J. Funding Rate of Return	(1.28)%	5.29 %	5.70 %			
K. Ratio of Funding Value to Market Value	115.08 %	103.71 %	100.07 %			

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, 2005, were reported to your actuary to be $8,811,146,753. This amount, together with a market value adjustment of $6,107,560, is used to finance the Retirement System liability.

Accounts	Assets at June 30 2005	Assets at June 30 2004
Regular Accounts		
Members' Deposit Accounts		
Contributions	$ 564,492,136	$ 520,068,364
Interest	4,662,808,951	4,250,423,700
Total	5,227,301,087	4,770,492,064
T-Drop Member Deposit Accounts		
Contributions	21,760,569	27,186,699
Interest	63,486,652	69,961,583
Total	85,247,221	97,148,282
Employer's Accumulation Account	(1,072,792,625)	(967,004,994)
Retirement Reserve Account	4,089,548,017	3,800,859,775
Act 808 Retirement Reserve Account	32,031,255	32,476,856
T-Lump Payable	373,080,530	309,422,855
Survivors Benefit Account	57,540,639	56,790,026
Total Regular Accounts	8,791,956,124	8,100,184,864
Other Accounts		
Income Expense Account	19,190,629	21,819,171
Other Special Reserves	0	0
Miscellaneous	0	0
Total Other Accounts	19,190,629	21,819,171
Total Accounting Value of Assets	8,811,146,753	8,122,004,035
Market Value Adjustment	6,107,560	301,575,230
Funding Value of Assets	$8,817,254,313	$8,423,579,265

In financing the Retirement System Accrued Liabilities, the applicable assets have been applied as follows.

	Assets Applied to Accrued Liabilities for		
	Retirees and Beneficiaries	All Other Members	Totals
Reserve Assets			
Member's Deposit Account	$ 0	$5,312,548,308	$5,312,548,308
Employer's Accumulation Account	96,540,153	(1,169,332,778)	(1,072,792,625)
Retirement Reserve Account	4,089,548,017	0	4,089,548,017
Act 808 Reserve Account	32,031,255	0	32,031,255
T-Lump Payable	0	373,080,530	373,080,530
Survivor's Benefit Account	57,540,639	0	57,540,639
Other Accounts	0	19,190,629	19,190,629
Total Reserve Assets	4,275,660,064	4,535,486,689	8,811,146,753
Market Value Adjustment	0	6,107,560	6,107,560
Funding Value of Assets	$4,275,660,064	$4,541,594,249	$8,817,254,313

The net market value of assets at year end was $8,811,146,753 and was invested as shown below.

	Market Value at June 30	
	2005	2004
Cash	$ 29,752,425	$ 37,667,099
Receivables		
Unsettled Trades and Accrued Return	369,120,442	311,049,067
Member Contributions	10,697,678	10,918,047
Employer Contributions	40,139,459	4,562,295
Other	639	57,272
Total Receivables	419,958,218	326,586,681
Investments		
Short Term	164,582,936	0
Common and Preferred	1,791,893,411	4,370,017,699
International	1,419,376,522	1,265,146,345
Corporate Bonds	466,688,606	151,942,996
Alternative Investments	878,375,030	1,001,450,932
Market Valuation	900,862,709	689,249,414
Real Estate	106,308,462	132,332,039
Mortgage Loans	66,423,910	149,695,207
Revenue Bonds	365,000	1,005,000
Government Securities	249,486,589	190,825,508
Other Investments	2,747,497,397	135,260,061
Repurchase Agreements	0	0
Total Investments	8,791,860,572	8,086,925,201
Invested Securities Lending	796,917,310	719,811,314
Net Equipment	385,709	3,640,032
Total Assets	10,038,874,234	9,174,630,327
Liabilities		
Escrow Payables	0	0
Other Payables	2,027,323	2,415,955
Securities Related Payables	428,782,848	330,399,023
Securities Lending Collateral	796,917,310	719,811,314
Total Liabilities	1,227,727,481	1,052,626,292
Net Market Value	$8,811,146,753	$8,122,004,035
Change from Prior Year	689,142,718	1,071,648,491

MARKET VALUE RECONCILIATION OF ASSETS

Assets during the year developed as follows:

	Year Ended June 30	
	2005	2004
Net Market Value July 1	$8,122,004,035	$7,050,355,544
Additions		
Employer Contributions	286,442,709	224,184,274
Employee Contributions	86,102,842	77,772,020
Appreciation	211,407,190	374,898,535
Interest	279,629,202	415,836,015
Dividends	316,978,174	435,238,395
Real Estate	7,727,203	7,737,709
Other	246,929	201,752
Securities Lending Activity	19,068,203	8,666,204
Total Additions	1,207,602,452	1,544,534,904
Deductions		
Age& Service Benefits	363,872,024	338,591,608
Disability Benefits	22,637,834	20,936,532
Option Benefits	10,188,011	9,511,558
Survivor Benefits	5,677,528	5,567,043
Reciprocal Service	13,027,579	11,543,592
Act 808	4,286,580	4,294,802
Refunds	4,413,077	4,017,884
Active Member Death	831,792	575,813
T-DROP Benefits	31,457,198	22,412,569
Investment Expense	55,623,879	47,256,789
Admin. Expense	6,444,232	8,178,223
Total Deductions	518,459,734	472,886,413
Miscellaneous	0	0
Net Market Value June 30	$8,811,146,753	$8,122,004,035

Basic Series **Year-by-Year Total Returns (1926-2004)**

For a type of investment,
Red means a REAL Return less than 3%
[(Total - Inflation) < 3%]

For Inflation,
RED means a purchasing power loss

Year	Large Company Stocks	Small Company Stocks	Long-Term Corporate Bonds	Long-Term Government Bonds	Intermediate Term Government Bonds	U.S. Treasury Bills	Inflation
1926	11.62	0.28	7.37	7.77	5.38	3.27	-1.49
1927	37.49	22.10	7.44	8.93	4.52	3.12	-2.08
1928	43.61	39.69	2.84	0.10	0.92	3.56	-0.97
1929	-8.42	-51.36	3.27	1.17	6.01	4.75	0.20
1930	-24.90	-38.15	7.98	4.66	6.72	2.41	-6.03
1931	-43.34	-49.75	-1.85	-5.31	-2.32	1.07	-9.52
1932	-8.19	-5.39	10.32	16.84	8.81	0.96	-10.30
1933	53.99	142.87	10.38	-0.07	1.83	0.30	0.51
1934	-1.44	24.22	13.84	10.03	9.00	0.16	2.03
1935	47.67	40.19	9.61	4.98	7.01	0.17	2.99
1936	33.92	64.80	6.74	7.52	3.06	0.18	1.21
1937	-35.03	-58.01	2.75	0.23	1.56	0.31	3.10
1938	31.12	32.80	6.13	5.53	6.23	-0.02	-2.78
1939	-0.41	0.35	3.97	5.94	4.52	0.02	-0.48
1940	-9.78	-5.16	3.39	6.09	2.96	0.00	0.96
1941	-11.59	-9.00	2.73	0.93	0.50	0.06	9.72
1942	20.34	44.51	2.60	3.22	1.94	0.27	9.29
1943	25.90	88.37	2.83	2.08	2.81	0.35	3.16
1944	19.75	53.72	4.73	2.81	1.80	0.33	2.11
1945	36.44	73.61	4.08	10.73	2.22	0.33	2.25
1946	-8.07	-11.63	1.72	-0.10	1.00	0.35	18.16
1947	5.71	0.92	-2.34	-2.62	0.91	0.50	9.01
1948	5.50	-2.11	4.14	3.40	1.85	0.81	2.71
1949	18.79	19.75	3.31	6.45	2.32	1.10	-1.80
1950	31.71	38.75	2.12	0.06	0.70	1.20	5.79
1951	24.02	7.80	-2.69	-3.93	0.36	1.49	5.87
1952	18.37	3.03	3.52	1.16	1.63	1.66	0.88
1953	-0.99	-6.49	3.41	3.64	3.23	1.82	0.62
1954	52.62	60.58	5.39	7.19	2.68	0.86	-0.50
1955	31.56	20.44	0.48	-1.29	-0.65	1.57	0.37
1956	6.56	4.28	-6.81	-5.59	-0.42	2.46	2.86
1957	-10.78	-14.57	8.71	7.46	7.84	3.14	3.02
1958	43.36	64.89	-2.22	-6.09	-1.29	1.54	1.76
1959	11.96	16.40	-0.97	-2.26	-0.39	2.95	1.50
1960	0.47	-3.29	9.07	13.76	11.76	2.66	1.48
1961	26.89	32.09	4.82	0.97	1.85	2.13	0.67
1962	-8.73	-11.90	7.95	6.89	5.56	2.73	1.22
1963	22.80	23.57	2.19	1.21	1.64	3.12	1.65
1964	16.48	23.52	4.77	3.51	4.04	3.54	1.19
1965	12.45	41.75	-0.46	0.71	1.02	3.93	1.92
1966	-10.06	-7.01	0.20	3.65	4.69	4.76	3.35
1967	23.98	83.57	-4.95	-9.18	1.01	4.21	3.04
1968	11.06	35.97	2.57	-0.26	4.54	5.21	4.72
1969	-8.50	-25.05	-8.09	-5.07	-0.74	6.58	6.11
1970	4.01	-17.43	18.37	12.11	16.86	6.52	5.49
1971	14.31	16.50	11.01	13.23	8.72	4.39	3.36
1972	18.98	4.43	7.26	5.69	5.16	3.84	3.41
1973	-14.66	-30.90	1.14	-1.11	4.61	6.93	8.80
1974	-26.47	-19.95	-3.06	4.35	5.69	8.00	12.20
1975	37.20	52.82	14.64	9.20	7.83	5.80	7.01
1976	23.84	57.38	18.65	16.75	12.87	5.08	4.81
1977	-7.18	25.38	1.71	-0.69	1.41	5.12	6.77
1978	6.56	23.46	-0.07	-1.18	3.49	7.18	9.03
1979	18.44	43.46	-4.18	-1.23	4.09	10.38	13.31
1980	32.42	39.88	-2.62	-3.95	3.91	11.24	12.40
1981	-4.91	13.88	-0.96	1.86	9.45	14.71	8.94
1982	21.41	28.01	43.79	40.36	29.10	10.54	3.87
1983	22.51	39.67	4.70	0.65	7.41	8.80	3.80
1984	6.27	-6.67	16.39	15.48	14.02	9.85	3.95
1985	32.16	24.66	30.09	30.97	20.33	7.72	3.77
1986	18.47	6.85	19.85	24.53	15.14	6.16	1.13
1987	5.23	-9.30	-0.27	-2.71	2.90	5.47	4.41
1988	16.81	22.87	10.70	9.67	6.10	6.35	4.42
1989	31.49	10.18	16.23	18.11	13.29	8.37	4.65
1990	-3.17	-21.56	6.78	6.18	9.73	7.81	6.11
1991	30.55	44.63	19.89	19.30	15.46	5.60	3.06
1992	7.67	23.35	9.39	8.05	7.19	3.51	2.90
1993	9.99	20.98	13.19	18.24	11.24	2.90	2.75
1994	1.31	3.11	-5.76	-7.77	-5.14	3.90	2.67
1995	37.43	34.46	27.20	31.67	16.80	5.60	2.54
1996	23.07	17.62	1.40	-0.93	2.10	5.21	3.32
1997	33.36	22.78	12.95	15.85	8.38	5.26	1.70
1998	28.58	-7.31	10.76	13.06	10.21	4.86	1.61
1999	21.04	29.79	-7.45	-8.96	-1.77	4.68	2.68
2000	-9.11	-3.59	12.87	21.48	12.59	5.89	3.39
2001	-11.88	22.77	10.65	3.70	7.62	3.83	1.55
2002	-22.10	-13.28	16.33	17.84	12.93	1.65	2.38
2003	28.70	60.70	5.27	1.45	2.40	1.02	1.88
2004	10.87	18.39	8.72	8.51	2.25	1.20	3.26

GABRIEL ROEDER SMITH & COMPANY from SBBI 2005 Yearbook

HISTORICAL PATTERNS OF INVESTMENT RETURN, PAY INCREASES & INFLATION

Calendar Year Period	Gross Market Returns: Bonds (Long) U.S. Treasury	Bonds (Long) Corp. (S&P AA)	Cash Equiv. (T Bills)	Stocks (S&P 500)	Price Inflation (CPI)	National Average Earnings	Sample Balanced Fund* Total Return (I)	Sample Balanced Fund* Spread: I - NAE - e
1950-59	(0.1)%	1.0 %	1.9 %	19.4 %	2.2 %	4.5 %	10.5 %	5.5 %
1960-69	1.4 %	1.7 %	3.9 %	7.8 %	2.5 %	4.3 %	5.2 %	0.4 %
1970-79	5.5 %	6.2 %	6.3 %	5.9 %	7.4 %	6.9 %	6.3 %	(1.1)%
1980-89	12.6 %	13.0 %	8.9 %	17.5 %	5.1 %	5.8 %	15.1 %	8.8 %
1990-99	8.8 %	8.4 %	4.9 %	18.2 %	2.9 %	4.2 %	13.2 %	8.5 %
2000-2004	10.3 %	10.7 %	2.7 %	(2.3)%	2.5 %	2.8 %	3.9 %	0.6 %
Last 55 Years	**6.0 %**	**6.4 %**	**4.9 %**	**12.1 %**	**3.9 %**	**4.9 %**	**9.4 %**	**4.0 %#**

*** Sample Balanced Fund**	
Equities	50%
Bonds - Government	20%
- Corporate	20%
Cash Equivalents	10%
	100%
Fund expenses(e)	0.50%@

 # Historical Spread

Observed spread is very sensitive to the observation period, even over long periods, as illustrated below:

Observation Period	Spread
55 years	4.0%
45 years	3.7%
35 years	4.6%
25 years	6.9%

@ *Generally includes administration manager fees and transaction costs.*

May vary anywhere from less than 0.3% to over 1.0% from system to system.

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 Covered Payroll	(6) UAAL as % of Covered 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%

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

SECTION E

Covered Member Data

Active members included in the valuation totaled 65,793 with annual payroll totaling $1,962,360,535.

TOTAL ACTIVE MEMBERS IN VALUATION JUNE 30, 2005
BY MEMBER'S CHOICE OF CONTRIBUTION RATE

Attained	Members Contributing Now			Members Not Contributing			Total
Age	Men	Women	Total	Men	Women	Total	Members
Under 20	3	2	5	23	49	72	77
20-24	195	755	950	232	594	826	1,776
25-29	790	3,087	3,877	305	1,052	1,357	5,234
30-34	1,013	3,532	4,545	456	2,130	2,586	7,131
35-39	834	3,647	4,481	602	3,133	3,735	8,216
40-44	916	4,106	5,022	917	4,210	5,127	10,149
45-49	1,144	4,659	5,803	899	4,176	5,075	10,878
50-54	1,148	4,335	5,483	857	3,518	4,375	9,858
55-59	860	3,324	4,184	707	2,548	3,255	7,439
60-64	450	1,339	1,789	418	1,261	1,679	3,468
65-69	127	227	354	259	395	654	1,008
70 & Up	58	49	107	195	257	452	559
Totals	**7,538**	**29,062**	**36,600**	**5,870**	**23,323**	**29,193**	**65,793**

WOMEN ACTIVE MEMBERS IN VALUATION JUNE 30, 2005
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	51							51	$ 233,320
20-24	1,342	7						1,349	23,480,038
25-29	3,429	707	3					4,139	108,192,913
30-34	2,800	2,379	482	1				5,662	152,238,690
35-39	2,782	1,905	1,640	450	3			6,780	180,331,736
40-44	2,797	2,078	1,411	1,500	524	6		8,316	226,322,970
45-49	1,901	1,865	1,692	1,379	1,283	714	1	8,835	278,438,242
50-54	1,474	1,342	1,483	1,496	812	1,199	47	7,853	263,148,696
55-59	1,151	888	944	1,354	828	661	46	5,872	188,951,476
60	171	97	102	140	99	79	4	692	20,906,022
61	164	104	94	122	69	76	5	634	18,082,258
62	135	90	84	100	65	54	6	534	14,647,540
63	91	83	61	69	57	47	5	413	11,316,472
64	88	55	52	61	30	37	4	327	8,155,785
65	81	48	39	33	25	16	4	246	5,551,460
66	70	18	10	11	11	6	1	127	2,221,823
67	72	15	9	3	2	6	1	108	1,544,783
68	47	12	1	3	1	1	1	66	865,222
69	49	24	1			1		75	809,303
70 & Up	194	76	21	11	2	1	1	306	3,121,209
Totals	**18,889**	**11,793**	**8,129**	**6,733**	**3,811**	**2,904**	**126**	**52,385**	**$1,508,559,958**

MEN ACTIVE MEMBERS IN VALUATION JUNE 30, 2005
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	26							26	$ 147,937
20-24	418	9						427	6,364,828
25-29	910	182	3					1,095	30,698,076
30-34	632	707	130					1,469	49,591,987
35-39	484	418	443	91				1,436	51,628,272
40-44	609	375	300	444	104	1		1,833	64,517,364
45-49	548	381	323	273	379	139		2,043	80,020,788
50-54	543	362	287	246	195	359	13	2,005	79,198,917
55-59	533	292	258	193	140	135	16	1,567	56,263,419
60	81	52	43	24	13	8	3	224	7,101,473
61	78	51	35	22	13	10		209	6,442,162
62	62	37	33	23	13	7	2	177	5,775,800
63	57	32	23	8	5	6	1	132	3,680,008
64	67	34	9	12	1	2	1	126	3,301,873
65	49	31	7	7	2	3	1	100	2,351,462
66	65	10	6	1		1		83	1,139,042
67	56	16	5					77	960,510
68	47	13	2	2	2			66	977,507
69	42	16	2					60	690,932
70 & Up	137	96	16	3	1			253	2,948,220
Totals	**5,444**	**3,114**	**1,925**	**1,349**	**868**	**671**	**37**	**13,408**	**$453,800,577**

TOTAL ACTIVE MEMBERS IN VALUATION JUNE 30, 2005
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	77							77	$ 381,257
20-24	1,760	16						1,776	29,844,866
25-29	4,339	889	6					5,234	138,890,989
30-34	3,432	3,086	612	1				7,131	201,830,677
35-39	3,266	2,323	2,083	541	3			8,216	231,960,008
40-44	3,406	2,453	1,711	1,944	628	7		10,149	290,840,334
45-49	2,449	2,246	2,015	1,652	1,662	853	1	10,878	358,459,030
50-54	2,017	1,704	1,770	1,742	1,007	1,558	60	9,858	342,347,613
55-59	1,684	1,180	1,202	1,547	968	796	62	7,439	245,214,895
60	252	149	145	164	112	87	7	916	28,007,495
61	242	155	129	144	82	86	5	843	24,524,420
62	197	127	117	123	78	61	8	711	20,423,340
63	148	115	84	77	62	53	6	545	14,996,480
64	155	89	61	73	31	39	5	453	11,457,658
65	130	79	46	40	27	19	5	346	7,902,922
66	135	28	16	12	11	7	1	210	3,360,865
67	128	31	14	3	2	6	1	185	2,505,293
68	94	25	3	5	3	1	1	132	1,842,729
69	91	40	3			1		135	1,500,235
70 & Up	331	172	37	14	3	1	1	559	6,069,429
Totals	**24,333**	**14,907**	**10,054**	**8,082**	**4,679**	**3,575**	**163**	**65,793**	**$1,962,360,535**

SUMMARY OF ACTIVE MEMBERS

	Teachers		Non-Teachers		Total Active Members	
	No.	Payroll	No.	Payroll	No.	Payroll
Women	26,100	$1,085,462,406	26,285	$ 423,097,552	52,385	$1,508,559,958
Men	6,833	324,681,018	6,575	129,119,559	13,408	453,800,577
All	32,933	$1,410,143,424	32,860	$ 552,217,111	65,793	$1,962,360,535

	Teachers	Non-Teachers	Total
Members Contributing Now	24,232	12,368	36,600
Members Not Contributing	8,701	20,492	29,193
All	32,933	32,860	65,793

	Group Averages		
	Women	Men	Total
Age:	44.0 years	45.0 years	44.2 years
Service:	9.6 years	8.7 years	9.4 years

ACTIVE MEMBERS IN VALUATION

June 30	Number	Group Averages			Active Member Payroll ($ Millions)
		Age	Service	Annual Earnings	
1986	34,274	40.5	10.6	$19,180	$ 657
1987	34,210	40.9	10.5	19,392	663
1988	38,024	40.8	10.0	19,274	733
1989	38,978	41.1	10.2	19,879	775
1990	41,800	41.3	9.9	19,776	827
1991	45,902	41.5	9.6	19,796	909
1992	55,688	41.3	8.5	19,338	1,077
1993	58,519	41.4	8.6	19,145	1,120
1994	57,402	42.1	9.1	20,337	1,167
1995	58,876	42.4	9.2	20,952	1,234
1996	56,100	43.0	9.8	22,463	1,260
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

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

DEFERRED VESTED MEMBERS AT JUNE 30, 2005
BY ATTAINED AGE

Age	Number	Estimated Annual Benefits	Contribution Balance
Below 40	1,887	$ 6,780,107	$ 5,828,640
40	328	1,192,771	822,565
41	374	1,346,382	1,025,724
42	354	1,311,728	1,117,161
43	378	1,369,693	1,257,998
44	399	1,525,271	1,585,303
45	339	1,225,433	1,440,061
46	368	1,424,524	1,471,133
47	369	1,515,864	1,918,687
48	404	1,682,683	2,331,962
49	377	1,524,169	1,821,336
50	385	1,722,845	2,670,919
51	362	1,556,504	2,168,284
52	356	1,600,043	2,592,762
53	345	1,630,822	2,751,438
54	337	1,701,881	3,098,745
55	373	1,827,439	3,607,097
56	332	1,644,190	3,297,679
57	334	1,860,881	4,109,072
58	333	1,734,232	4,036,795
59	225	1,161,594	2,809,551
60 & Up	511	1,615,835	2,922,791
Totals	**9,470**	**$38,954,891**	**$54,685,703**

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

This valuation also includes 66 beneficiaries of deceased retirees who are eligible for a pension at age 62.

MEMBERS PARTICIPATING IN T-DROP AT JUNE 30, 2005
BY ATTAINED AGE

Age	Number	Current T-DROP Contribution	Original T-DROP Contribution	T-DROP Account Balance	Pay
45	1	$ 17,814	$ 17,295	$ 17,625	$ 52,160
47	1	28,092	27,274	27,794	78,209
48	5	73,538	69,721	136,205	257,981
49	18	287,187	280,504	321,923	874,119
50	68	1,160,630	1,123,695	1,545,567	3,437,630
51	202	3,475,682	3,339,599	5,729,224	10,489,663
52	290	4,966,878	4,766,061	9,878,623	14,977,889
53	373	6,679,560	6,357,946	17,716,577	20,098,713
54	394	7,194,027	6,742,403	23,788,810	21,326,086
55	425	7,916,812	7,336,520	29,528,550	23,055,564
56	454	8,628,398	7,839,663	36,745,466	25,423,909
57	451	8,581,332	7,686,229	39,702,222	24,656,083
58	456	8,867,079	7,775,456	45,543,625	25,207,564
59	283	5,456,723	4,748,324	28,925,699	15,519,929
60	236	4,733,677	4,016,787	27,921,113	13,107,686
61	229	4,834,938	4,117,552	28,132,307	13,196,706
62	184	3,597,418	3,006,739	22,343,332	9,963,254
63	124	2,387,046	1,984,840	15,516,606	6,823,898
64	86	1,847,390	1,422,282	11,362,331	4,779,127
65	60	1,786,094	1,018,635	8,503,805	3,383,566
66	31	963,374	525,046	5,888,260	1,744,362
67	22	662,522	382,562	4,149,366	1,358,990
68	18	710,456	393,694	4,787,694	1,061,720
69	13	445,003	219,339	3,323,970	643,855
70	10	361,247	198,852	2,595,959	631,801
71	4	190,579	107,801	1,505,983	325,455
72	2	89,638	49,160	945,312	139,737
73	3	129,156	57,825	1,043,874	165,239
74	2	86,963	64,235	486,535	118,471
76	2	52,564	24,859	422,772	80,265
79	1	2,184	3,015	0	49,406
Totals	4,448	**$86,214,001**	**$75,703,913**	**$378,537,129**	**$243,029,037**

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, 2005
BY ATTAINED AGE
ENTERING T-DROP BEFORE SEPTEMBER 2003

Age	Number	Current T-DROP Contribution	Original T-DROP Contribution	T-DROP Account Balance	Pay
48	3	$ 49,822	$ 46,695	$ 112,740	$ 192,272
49	2	30,709	29,766	67,993	108,347
50	20	314,248	299,467	699,630	1,066,405
51	98	1,691,783	1,603,360	3,867,654	5,205,667
52	192	3,270,559	3,111,396	8,097,140	9,964,434
53	301	5,387,057	5,097,174	16,327,738	16,459,779
54	343	6,296,604	5,867,857	22,794,823	18,767,899
55	377	7,051,901	6,494,689	28,664,751	20,612,860
56	410	7,870,474	7,101,457	35,917,806	23,282,571
57	411	7,959,594	7,081,611	38,993,707	22,764,235
58	422	8,370,921	7,292,028	45,017,320	23,542,060
59	257	5,025,671	4,324,825	28,393,013	14,251,401
60	217	4,449,542	3,739,891	27,655,395	12,299,527
61	213	4,571,683	3,860,189	27,837,267	12,491,115
62	165	3,284,883	2,703,798	21,974,503	9,069,585
63	110	2,188,170	1,788,536	15,281,074	6,150,290
64	81	1,767,062	1,344,294	11,275,875	4,543,544
65	56	1,726,536	961,380	8,436,049	3,216,039
66	30	959,792	521,568	5,884,716	1,720,721
67	21	640,713	361,389	4,127,789	1,298,840
68	18	710,456	393,694	4,787,694	1,061,720
69	13	445,003	219,339	3,323,970	643,855
70	10	361,247	198,852	2,595,959	631,801
71	4	190,579	107,801	1,505,983	325,455
72	2	89,638	49,160	945,312	139,737
73	3	129,156	57,825	1,043,874	165,239
74	2	86,963	64,235	486,535	118,471
76	2	52,564	24,859	422,772	80,265
Totals	3,783	**$74,973,330**	**$64,747,135**	**$366,539,082**	**$210,174,134**

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

MEMBERS PARTICIPATING IN T-DROP AT JUNE 30, 2005
BY ATTAINED AGE
ENTERING T-DROP AFTER AUGUST 2003

Age	Number	Current T-DROP Contribution	Original T-DROP Contribution	T-DROP Account Balance	Pay
45	1	$ 17,814	$ 17,295	$ 17,625	$ 52,160
47	1	28,092	27,274	27,794	78,209
48	2	23,716	23,026	23,465	65,709
49	16	256,478	250,738	253,930	765,772
50	48	846,382	824,228	845,937	2,371,225
51	104	1,783,899	1,736,239	1,861,570	5,283,996
52	98	1,696,319	1,654,665	1,781,483	5,013,455
53	72	1,292,503	1,260,772	1,388,839	3,638,934
54	51	897,423	874,546	993,987	2,558,187
55	48	864,911	841,831	863,799	2,442,704
56	44	757,924	738,206	827,660	2,141,338
57	40	621,738	604,618	708,515	1,891,848
58	34	496,158	483,428	526,305	1,665,504
59	26	431,052	423,499	532,686	1,268,528
60	19	284,135	276,896	265,718	808,159
61	16	263,255	257,363	295,040	705,591
62	19	312,535	302,941	368,829	893,669
63	14	198,876	196,304	235,532	673,608
64	5	80,328	77,988	86,456	235,583
65	4	59,558	57,255	67,756	167,527
66	1	3,582	3,478	3,544	23,641
67	1	21,809	21,173	21,577	60,150
79	1	2,184	3,015	0	49,406
Totals	665	**$11,240,671**	**$10,956,778**	**$11,998,047**	**$32,854,903**

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, 2005
BY TYPE OF ANNUITY BEING PAID

Type of Annuity	No.	Annual Amounts: Original Annuities	Annual Amounts: Base Annuities	Annual Amounts: Current Annuities
RETIREMENT RESERVE ACCOUNT				
Age & Service				
Option 1 (Basic single life)	15,851	$185,973,243	$244,608,251	$294,888,378
Option A (Joint & 100% S.)	1,796	25,283,042	29,159,465	34,410,916
Option B (Joint & 50% S.)	1,158	21,745,023	26,024,310	31,272,574
Option C (10 year certain)	455	7,413,478	7,899,632	9,186,590
Beneficiaries	480	5,744,946	6,501,352	7,670,530
Totals	19,740	246,159,732	314,193,010	377,428,988
Disability				
Option 1	1,504	11,969,221	15,945,104	18,808,867
Option A	201	1,807,968	2,173,193	2,497,942
Option B	52	595,842	712,179	829,973
Option C	59	519,225	550,548	610,130
Beneficiaries	254	1,943,158	2,580,781	3,054,914
Totals	2,070	16,835,414	21,961,805	25,801,826
Act 793	206	1,231,605	1,888,109	1,888,109
Totals	22,016	264,226,751	338,042,924	405,118,923
SURVIVOR'S BENEFIT ACCOUNT				
Beneficiaries of Deceased Members	533	3,429,829	4,748,035	5,619,675
ACT 808				
Act 808	131	2,137,588	4,300,244	4,300,244
RETIREMENT SYSTEM TOTALS				
Total Annuities Being Paid	22,680	$269,794,168	$347,091,203	$415,038,842

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, 2005.

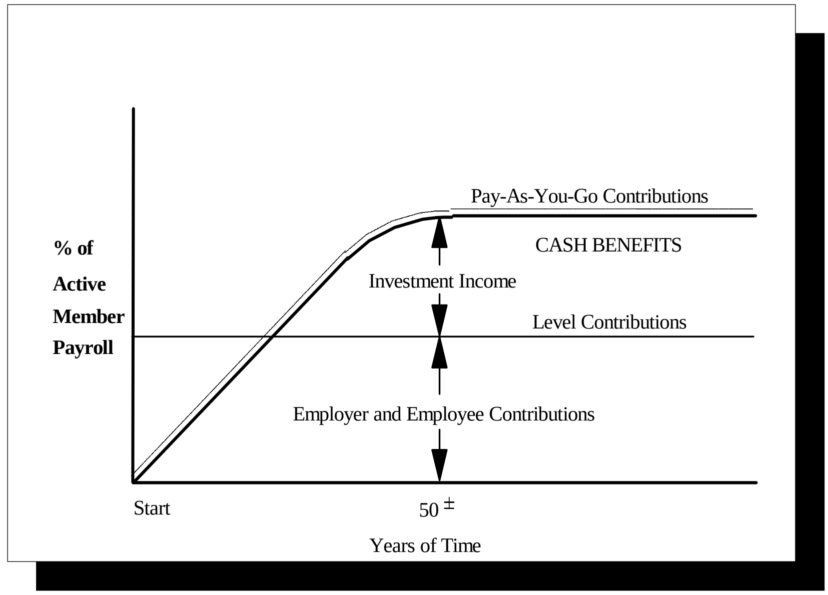
SECTION F

Actuarial Assumptions and Miscellaneous

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 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 8.0% 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 4.0%, the 8.0% rate translates to an assumed real rate of return over wage inflation of 4.0%. This rate was first used for the ***June 30, 2002*** valuation. The assumed real rate of return over price inflation would be higher – on the order of 4.5% to 5%.

Pay increase assumptions for individual active members are shown on pages F-8 and F-9. Part of the assumption for each age is for a merit and/or seniority increase, and the other 4.0% recognizes wage inflation. These rates were first used for the ***June 30, 2002*** 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 3.0% or 3.5%. 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 4.0% 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, 2002*** valuation.

Non-Economic Assumptions

The mortality table used to measure retired life mortality was the 1983 Group Annuity Mortality Table. Related values are shown on page F-4. This table was first used for the ***June 30, 1998*** valuation. For disabled lives, the mortality table is 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 F-5 and F-6. The rates for full retirement were first used in the ***June 30, 2005*** 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 F-8 and F-9. The withdrawal and disability rates were first used in the ***June 30, 2002*** valuation. The death-in-service rates were first used in the ***June 30, 2002*** 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-4. 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 $55,558. Those that entered after were assumed to have the group average pay of $49,406.

The actuarial valuation computations were made by or under the supervision of a Member of the American Academy of Actuaries (M.A.A.A.).

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	$142.98	$147.82	$184.74	$193.70	38.46	44.52	0.12 %	0.07 %
45	138.18	144.67	176.24	187.61	33.74	39.69	0.22 %	0.10 %
50	132.10	140.42	165.94	179.79	29.18	34.92	0.39 %	0.16 %
55	124.57	134.74	153.75	169.90	24.82	30.24	0.61 %	0.25 %
60	115.04	127.24	139.16	157.58	20.64	25.67	0.92 %	0.42 %
65	103.26	117.61	122.19	142.67	16.69	21.29	1.56 %	0.71 %
70	90.18	105.53	104.27	125.11	13.18	17.13	2.75 %	1.24 %
75	76.40	91.57	86.27	105.96	10.15	13.37	4.46 %	2.40 %
80	62.65	77.16	69.17	87.10	7.64	10.20	7.41 %	4.29 %
85	50.59	62.99	54.72	69.36	5.73	7.58	11.48 %	6.99 %
Ref:	30 x 1.00	31 x 1.00	30 x 1.00	31 x 1.00				

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	94%	97%
70	130.00	85%	93%
75	145.00	72%	86%
80	160.00	54%	73%
Ref		30	31

PROBABILITIES OF RETIREMENT FOR MEMBERS

Retirement Ages	% of Active Participants Retiring with Unreduced Benefits			
	Education		Support	
	Male	Female	Male	Female
48	50%	40%	50%	30%
49	50%	40%	50%	30%
50	13%	8%	5%	9%
51	10%	8%	5%	9%
52	9%	8%	12%	8%
53	9%	9%	13%	12%
54	9%	9%	8%	10%
55	9%	11%	8%	12%
56	12%	11%	9%	11%
57	10%	13%	14%	9%
58	11%	13%	15%	16%
59	14%	18%	11%	28%
60	14%	17%	9%	14%
61	14%	15%	10%	14%
62	28%	25%	28%	21%
63	17%	18%	20%	17%
64	17%	17%	20%	16%
65	27%	38%	30%	30%
66	30%	30%	30%	30%
67	30%	30%	30%	30%
68	30%	30%	30%	30%
69	30%	30%	30%	30%
70	30%	30%	30%	30%
71	30%	30%	30%	30%
72	30%	30%	30%	30%
73	30%	30%	30%	30%
74	30%	30%	30%	30%
75	100%	100%	100%	100%
Ref	1016	1017	1018	1019

These rates are based upon data presented in the 1997-2002 experience study and were first used in the 2005 valuation.

PROBABILITIES OF REDUCED RETIREMENT FOR MEMBERS

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%
60	100%	100%	100%	100%
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 T-DROP members are assumed to enter and exit T-DROP at the time that is to their greatest financial advantage.

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					32.00%	25.00%
	1					15.00%	12.00%
	2					11.00%	9.00%
	3					7.50%	9.00%
	4					5.00%	7.00%
20	5 & Up	0.02%	0.01%	0.10%	0.09%	4.60%	4.60%
25		0.02%	0.01%	0.10%	0.09%	4.60%	4.84%
30		0.03%	0.02%	0.08%	0.07%	3.94%	4.40%
35		0.04%	0.02%	0.08%	0.07%	3.20%	3.10%
40		0.06%	0.03%	0.14%	0.13%	2.70%	2.20%
45		0.11%	0.05%	0.24%	0.22%	2.08%	2.00%
50		0.20%	0.08%	0.53%	0.47%	1.62%	1.70%
55		0.31%	0.13%	0.88%	0.79%	1.50%	1.50%
60		0.46%	0.21%	1.00%	0.90%	1.50%	1.50%
65		0.78%	0.35%	1.00%	0.90%	1.50%	1.50%
Ref:						136	272
		30 x 0.5	31 x 0.5	135 x 1	135 x 0.9	556	558

Age	Pay Increase Assumptions for an Individual Member		
	Merit & Seniority	Base (Economic)	Increase Next Year
20	5.4%	4.0%	9.4%
25	4.4%	4.0%	8.4%
30	3.4%	4.0%	7.4%
35	2.4%	4.0%	6.4%
40	1.7%	4.0%	5.7%
45	1.2%	4.0%	5.2%
50	0.8%	4.0%	4.8%
55	0.4%	4.0%	4.4%
60	0.3%	4.0%	4.3%
65	0.3%	4.0%	4.3%
Ref:	197		

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 Men	Death Women	Disability Men	Disability Women	Other Men	Other Women
	0					40.00%	40.00%
	1					30.00%	25.00%
	2					22.00%	18.00%
	3					18.00%	14.00%
	4					13.00%	11.00%
20	5 & Up	0.02%	0.01%	0.10%	0.08%	13.00%	11.00%
25		0.02%	0.01%	0.10%	0.08%	12.00%	11.00%
30		0.03%	0.02%	0.08%	0.07%	10.80%	7.60%
35		0.04%	0.02%	0.08%	0.07%	8.20%	5.40%
40		0.06%	0.03%	0.14%	0.12%	5.80%	4.70%
45		0.11%	0.05%	0.24%	0.19%	4.10%	4.20%
50		0.20%	0.08%	0.53%	0.42%	2.90%	2.80%
55		0.31%	0.13%	0.88%	0.70%	1.90%	1.70%
60		0.46%	0.21%	1.00%	0.80%	1.50%	1.50%
65		0.78%	0.35%	1.00%	0.80%	1.50%	1.50%
Ref:						273	274
		30 x 0.5	31 x 0.5	135 x 1	135 x 0.8	560	559

Age	Pay Increase Assumptions for an Individual Member: Merit & Seniority	Base (Economic)	Increase Next Year
20	6.1%	4.0%	10.1%
25	5.2%	4.0%	9.2%
30	4.2%	4.0%	8.2%
35	3.6%	4.0%	7.6%
40	2.9%	4.0%	6.9%
45	1.5%	4.0%	5.5%
50	0.6%	4.0%	4.6%
55	0.2%	4.0%	4.2%
60	0.0%	4.0%	4.0%
65	0.0%	4.0%	4.0%
Ref:	198		

MISCELLANEOUS AND TECHNICAL ASSUMPTIONS
JUNE 30, 2005

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 and T-DROP, 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 exact fractional service 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 and mortality decrements do 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 1.0% load was included to account for subsidized Options, Service Purchases, etc.

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.

January 9, 2006

Mr. David Malone
Executive Director
Arkansas Teacher Retirement System
Education Building West
State Capitol Grounds
Little Rock, Arkansas 72201

Re: Report of June 30, 2005 Actuarial Valuation
of Active and Inactive Members

Dear Mr. Malone:

Enclosed are 35 copies of the report. If you need anything else, please call.

Sincerely,

Judith A. Kermans

JAK/lr
Enclosures