



**West Virginia  
Teachers Retirement System**

**Actuarial Valuation  
As of July 1, 2007**

**Prepared by:**

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an ACS company  **ACS**

**for the  
West Virginia Consolidated Public Retirement Board**

**December 2007**

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January 4, 2008

West Virginia Consolidated Public Retirement Board  
4101 MacCorkle Avenue, SE  
Charleston, WV 25304

Re: West Virginia Teachers' Retirement System; Actuarial Valuation as of July 1, 2007

Retirement Board Members:

We respectfully present our report on the actuarial valuation of the West Virginia Teachers' Retirement System as of July 1, 2007. This valuation presents the liabilities of the plan as of the valuation date and the projected Employer contribution for fiscal year 2009.

Some key highlights are:

- The valuation was prepared under an assumed interest rate of 7.5%.
- Based on the valuation results the State contribution to the Plan for Fiscal Year 2009 is \$323,323,000. The State appropriation needed for Fiscal Year 2009 for the Teachers' Retirement Plans (TRS and TDC) under the School Aid Formula is \$333,657,000.
- The funded percentage of plan assets to the actuarial accrued liability as of the valuation date is 51%, an increase of almost 20% over the prior year.

This report contains supporting data and background information pertaining to the development of costs and related liabilities of the plan. The valuation is based on:

- membership data as of June 30, 2007 maintained by the West Virginia Consolidated Public Retirement Board,
- financial information received from the West Virginia Investment Management Board.

Board of Trustees

January 4, 2008

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This report presents fairly the actuarial position of the West Virginia Teachers' Retirement System (TRS) as of July 1, 2007 in accordance with generally accepted actuarial principles applied on a basis consistent with that of the preceding valuation. In our opinion, the assumptions used in preparing the liabilities and costs are individually reasonable in respect to TRS experience and represent our best estimate of anticipated experience under TRS.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Peter D. Verne". The signature is cursive and somewhat stylized.

Peter D. Verne  
Principal and Consulting Actuary

PDV/esb

Enclosure

This report presents the results of the July 1, 2007 actuarial valuation of the West Virginia Teachers' Retirement System and includes the projected employer contribution requirement for Fiscal Year 2009. In addition the report includes disclosure information under GASB-25 and GASB-27. A summary of the plan features, a summary of the method, factors and assumptions and supplementary membership tables used in the valuation are also included.

**Valuation Results**

The West Virginia Teachers' Retirement System (TRS) is a defined benefit plan covering education employees hired prior to July 1, 1991 or hired on and after July 1, 2005. The plan provides unreduced monthly benefits to members upon retirement after 35 years of service, or at age 60 after completing 5 years of service. The plan also provides reduced early retirement benefits, benefits in the event of disability or death while active, and deferred benefits to members who terminate prior to retirement, providing plan eligibility conditions are met.

The plan is funded through member contributions of 6% of payroll and employer contributions sufficient to provide for any remaining normal cost (after member contributions are accounted for) and to amortize the unfunded liability as a level percentage of total education payroll through fiscal year 2008 and as a level dollar amount starting from fiscal year 2009. The total education payroll combines the payrolls of the Teachers' Retirement System plus the Teachers' Defined Contribution Plan (TDC).

The major purpose of this valuation is to determine the amount of appropriation needed for Fiscal Year 2009 for West Virginia's Teachers Retirement Plans under the School Aid Formula (SAF), which is determined to be \$333,657,000. Two components of the SAF determination are calculated in the valuation process: the contributions required from the State of West Virginia for the Teachers Retirement System (TRS), and a projection of the State's contributions to the Teachers Defined Contribution Plan (TDC), both for the Fiscal Year 2009.

The State's contribution to TRS is based on an actuarial valuation of the provisions of the State code and the participant data, in consideration of the assets held in trust for TRS. The details of the TRS contribution for Fiscal Year 2009 are shown in Table 1.

The State's TRS contribution for FY2009, assuming a mid-year payment, consists of three separate components:

- The State share of the normal cost,
- The amount needed to fund the unfunded actuarial accrued liability, net of the liability for recent benefit changes, over a 40 year period which began in 1994 (as required by Section 18-9A-6a of the State code), and
- The amount required to separately amortize the liability for recent benefit changes. For FY2009 this includes the 2006 retiree increase.

The total State TRS contribution on this basis is \$323,323,000.

Starting with FY2009 the annual amortization payment toward the segment of the unfunded liability that is being amortized over the 40-year period from July 1, 1994 is determined as a level dollar amount, (in prior years it was determined as a level percentage of the projected total education payroll). The total amount contributed to the Plan from FY2009 forward will fund the normal cost plus interest and principal on the unfunded liability, fully amortizing the unfunded liability by the end of FY2034.

For FY2009 the annual amortization payment toward the unfunded liability for the 2006 retiree increase is \$3,869,000. This payment will be made through FY2012.

Table 2 presents the development of the School Aid Formula, separately identifying the TRS contribution based on the original 40 year amortization, the special payments toward the additional unfunded due to recent plan improvements and other specific components. Detailed

projections of the balance of the 40 year funding program under the level dollar amortization schedule starting in FY2009 and net of the separately funded improvements, are shown in Tables 3 and 4.

The projected TDC contribution for Fiscal Year 2009 for the School Aid Formula is based on projected payroll for that participant population, taking into account growth in total teacher payroll for the state. The split of both the TRS and the TDC contributions is based on information provided by the state Education Department. The projected fire insurance premium tax shown in Table 2 was provided by the Department of Administration.

### **Comments on Valuation Results**

Table 1 presents the development of the valuation results as of July 1, 2007 and, for comparison purposes, July 1, 2006. Based on the prior year's projections, the expected unfunded actuarial accrued liability as of July 1, 2007 was \$4.720 billion. The actual unfunded liability at the valuation date is \$3.477 billion, a decrease of \$1.243 billion.

The decrease in the unfunded liability was primarily due to the following:

- Plan assets returned approximately 16.8% over the year ending June 30, 2007. This was well above the prior year's valuation assumption of a 7.5% return and decreased the unfunded liability by approximately \$202 million.
- Additional contributions due to Special Appropriations and the Tobacco Securitization decreased the unfunded liability by approximately \$1.121 billion.
- The combined impact of plan experience from turnover, mortality and retirement, and revisions to the assumptions based on the 2002-2006 experience study increased the unfunded liability by approximately \$80 million.

Tables 3 and 4 present projections of the unfunded accrued liability, net of the separately funded liability, to June 30, 2034. Table 3 illustrates the expected pattern of change in the unfunded liability over the remaining 27 year period, decreasing steadily to zero at the end of the period. Table 4 presents the expected funding progress toward the unfunded actuarial accrued liability based on the funding policy. This table illustrates the expected dollar amount of change in this segment of the unfunded from year to year.

Table 5 presents a cash flow projection of expected asset balances, contributions, disbursements and earnings over the period to FY2034.

The valuation results were determined using an interest rate of 7.5% with an underlying inflation assumption of 3.0%.

### **Funding Progress**

The information used to report on the funding status of the Plan for both the State's and the Plan's financial statements is presented in Table 6. This table presents information required under Governmental Accounting Standards Board Statement Numbers 25 and 27 (GASB-25 and GASB-27).

### **Plan Membership**

A summary of plan membership, with a comparison to the prior year, follows:

	<u>7/1/2007</u>	<u>7/1/2006</u>
Actives	19,529	18,633
Retirees & Beneficiaries	28,040	27,389
Terminated Vested	3,259	3,397
Terminated Nonvested	358	55
Total	<u>51,186</u>	<u>49,474</u>

Table 9 presents a reconciliation of plan membership over the year. Table 10 presents more detailed information on the categories of plan membership.



Tables 11(a) and 11(b) present an age and service distribution of actives separately for the Teachers and Nonteachers (including State) groups, showing the number of participants in each age/service cell and the total annual compensation. Tables 12 and 13 present the retired participants and deferred vested participants respectively by 5-year age groups, showing the number of participants and average monthly benefit.

**West Virginia Teachers' Retirement System**  
**Table 1**

**Development of Valuation Results and Comparison to Prior Year**  
**(000 omitted)**

	Valuation Date	
	July 1, 2007	July 1, 2006
<b>1. Present Value of Benefits</b>		
a. Active	\$ 3,625,549	\$ 3,602,335
b. Inactive - Retirees	3,542,798	3,283,033
- Disabled Retirees	167,680	156,643
- Beneficiaries	151,078	141,490
- Vested Terminated	123,119	127,950
- Non-Vested Terminated	<u>536</u>	<u>285</u>
c. Total	7,610,760	7,311,736
<b>2. Actuarial Accrued Liability</b>	7,142,711	6,877,872
<b>3. Assets (Market Value)</b>	<u>3,665,993</u>	<u>2,174,464</u>
<b>4. Unfunded Actuarial Accrued Liability (UAL)</b>	3,476,718	4,703,408
<b>5. Annual Normal Cost Rate: Type 1 (Pre 7/1/1991 Group)</b>		
a. Present Value of Future Normal Costs	331,197	369,812
b. Present Value of Future Pay	3,685,405	4,085,821
c. Normal Cost Rate as a % of Payroll	8.99%	9.05%
d. Employee share	6.00%	6.00%
e. Employer share	2.99%	3.05%
f. TRS FY2008 (2007) Normal Cost Payroll	698,775	703,678
g. Employer FY2008 (2007) Normal Cost (BOY)	20,893	21,462
h. TRS FY2009 (2008) Normal Cost Payroll	650,953	649,644
i. Employer FY2009 (2008) Normal Cost (BOY)	19,463	19,814
<b>6. Annual Normal Cost Rate: Type 3 (Post 6/30/2005 Group)</b>		
a. Present Value of Future Normal Costs	136,852	64,052
b. Present Value of Future Pay	1,353,697	625,934
c. Normal Cost Rate as a % of Payroll	10.11%	10.23%
d. Employee share	6.00%	6.00%
e. Employer share	4.11%	4.23%
f. TRS FY2008 (2007) Normal Cost Payroll	130,164	55,529
g. Employer FY2008 (2007) Normal Cost (BOY)	5,350	2,349
h. TRS FY2009 (2008) Normal Cost Payroll	224,513	153,108
i. Employer FY2009 (2008) Normal Cost (BOY)	9,227	6,476

**Table 1 (Continued)**  
**(000 omitted)**

	Valuation Date	
	July 1, 2007	July 1, 2006
<b>7. Employer Contribution for FY2008/FY2009,</b> assumes mid-year contribution:		
	<u>FY2008</u>	<u>FY2007</u>
a. FY2008 (2007)		
i. TRS and TDC Payroll	1,480,562	1,391,490
ii. FY2008 (2007) TRS Contribution		
A. Normal Cost	27,209	24,687
B. Amortization components		
- Original UAL over 40 years as level % of TRS + TDC Payroll (FY2008 Appropriation Amount)	300,000	283,362
- 2001, retiree increase	14,334	14,334
- 2006, retiree increase	3,869	4,685
C. Total	345,412	327,068
iii. FY2008 (2007) Contribution as a % of Payroll	23.33%	23.50%
	<u>FY2009</u>	<u>FY2008</u>
b. FY2009 (2008)		
i. TRS and TDC Payroll	1,527,940	1,436,018
ii. FY2009 (2008) TRS Contribution		
A. Normal Cost	29,747	27,259
B. Amortization Components		
- original UAL over 40 years as a level dollar amount; FY2008, level % of TRS + TDC Payroll	289,707	291,038
- 2001, retiree increase	0	14,334
- 2006, retiree increase	3,869	4,685
C. Total	323,323	337,316
iii. FY2009 (2008) TRS Contribution as a % of Payroll	21.16%	23.49%
iv. FY2009 (2008) SAF appropriation <sup>1/</sup>	333,657	352,937
v. FY2009 (2008) SAF appropriation as a % of Payroll	21.84%	24.58%

<sup>1/</sup> The School Aid Formula retirement allocation includes the amount the State appropriates for the Teachers Defined Contribution Plan and required payments toward the TRS Unfunded Actuarial Accrued Liabilities. It does NOT include amounts contributed to TRS by nonstate groups or the fire premium tax.

## West Virginia Teachers' Retirement System

Table 2

Development of School Aid Formula Appropriation for Fiscal Year 2009  
(000 omitted)

TRS Contribution for FY2009	\$	319,454
+ .075 x School Aid Formula (TDC only) <sup>1/</sup>		37,924
- .15 x County Portion of the Old Group TRS payroll <sup>2/</sup>		(22,095)
- .075 x County Portion of the New Group TRS Payroll <sup>3/</sup>		(3,809)
- Fire Tax Per Code section 33-3-14(d)		(2,545)
+ State payment equal to TDC forfeitures <sup>4/</sup>		<u>859</u>
Subtotal of Standard SAF Appropriation	\$	329,788
Special Payments for Benefit Improvements 2001 and 2006 Retiree Increases		<u>3,869</u>
Total FY2009 SAF Appropriation		333,657

<sup>1/</sup> School Aid Formula for TDC only is  $.7696 \times \text{FY2009 TDC pay for County employees} + \text{FY2009 TDC pay for State employees} = .7696 \times \$637,230 + \$15,243 = \$505,655$

<sup>2/</sup> County portion of the Old Group TRS payroll is  $.2304 \times \text{FY2009 TRS pay for County employees} = .2304 \times \$639,311 = \$147,297$

<sup>3/</sup> County portion of the New Group TRS payroll is  $.2304 \times \text{FY2009 TRS pay for County employees} = .2304 \times \$220,414 = \$50,783$

<sup>4/</sup> Actual amount to be released from the TDC suspense account at 6/30/2007 per Code section 18-7A-18a(b)

West Virginia Teachers' Retirement System

Table 3

Projection of Unfunded Accrued Liability and Annual Contributions  
(000 omitted)

FY Ending 6/30	Unfunded AAL BOY	Employer Normal Cost <sup>1</sup>		Employer Normal Cost <sup>2</sup>		Projected Type 1 TRS Payroll	Projected Type 3 TRS Payroll	Projected Total Payroll TRS+TDC	Total Type 1 Employer Contribution <sup>3</sup>		Total Type 3 Employer Contribution	
		Type 1 (MOY)	Type 3 (MOY)	Type 1 TRS Payroll	Type 3 TRS Payroll				% of Payroll	Amount (MOY)	% of Payroll	Amount (MOY)
2008	3,446,624	20,544	6,715	698,775	130,164	1,480,562	130,164	1,480,562	21.65%	320,544	0.45%	6,715
2009	3,394,074	20,180	9,567	650,953	224,513	1,527,940	224,513	1,527,940	20.28%	309,887	0.63%	9,567
2010	3,348,255	18,695	13,706	603,051	321,646	1,576,834	321,646	1,576,834	19.56%	308,402	0.87%	13,706
2011	3,299,000	17,115	18,113	552,073	425,049	1,627,292	425,049	1,627,292	18.85%	306,822	1.11%	18,113
2012	3,246,050	15,496	22,713	499,869	533,013	1,679,366	533,013	1,679,366	18.17%	305,203	1.35%	22,713
2013	3,189,129	13,853	27,510	446,848	645,577	1,733,105	645,577	1,733,105	17.52%	303,560	1.59%	27,510
2014	3,127,939	12,209	32,465	393,829	761,847	1,788,565	761,847	1,788,565	16.88%	301,916	1.82%	32,465
2015	3,062,160	10,645	37,481	343,384	879,566	1,845,799	879,566	1,845,799	16.27%	300,352	2.03%	37,481
2016	2,991,447	9,189	42,501	296,408	997,367	1,904,864	997,367	1,904,864	15.69%	298,896	2.23%	42,501
2017	2,915,431	7,848	47,531	253,159	1,115,403	1,965,820	1,115,403	1,965,820	15.14%	297,555	2.42%	47,531
2018	2,833,714	6,610	52,597	213,210	1,234,279	2,028,726	1,234,279	2,028,726	14.61%	296,317	2.59%	52,597
2019	2,745,868	5,476	57,674	176,646	1,353,434	2,093,646	1,353,434	2,093,646	14.10%	295,183	2.75%	57,674
2020	2,651,433	4,479	62,712	144,470	1,471,646	2,160,642	1,471,646	2,160,642	13.62%	294,186	2.90%	62,712
2021	2,549,916	3,606	67,718	116,334	1,589,127	2,229,783	1,589,127	2,229,783	13.15%	293,313	3.04%	67,718
2022	2,440,785	2,864	72,712	92,374	1,706,318	2,301,136	1,706,318	2,301,136	12.71%	292,571	3.16%	72,712
2023	2,323,469	2,243	77,771	72,337	1,825,039	2,374,772	1,825,039	2,374,772	12.29%	291,950	3.27%	77,771
2024	2,197,355	1,723	82,950	55,585	1,946,574	2,450,765	1,946,574	2,450,765	11.89%	291,430	3.38%	82,950
2025	2,061,782	1,311	88,149	42,282	2,068,572	2,529,189	2,068,572	2,529,189	11.51%	291,018	3.49%	88,149
2026	1,916,041	986	93,350	31,800	2,190,617	2,610,123	2,190,617	2,610,123	11.14%	290,693	3.58%	93,350
2027	1,759,369	729	98,550	23,515	2,312,648	2,693,647	2,312,648	2,693,647	10.78%	290,436	3.66%	98,550
2028	1,590,947	532	103,759	17,157	2,434,890	2,779,844	2,434,890	2,779,844	10.44%	290,239	3.73%	103,759
2029	1,409,893	382	109,014	12,307	2,558,212	2,868,799	2,558,212	2,868,799	10.11%	290,089	3.80%	109,014
2030	1,215,260	270	114,320	8,723	2,682,735	2,960,601	2,682,735	2,960,601	9.79%	289,977	3.86%	114,320
2031	1,006,030	190	119,695	6,120	2,808,848	3,055,340	2,808,848	3,055,340	9.49%	289,897	3.92%	119,695
2032	781,108	130	125,158	4,201	2,937,069	3,153,111	2,937,069	3,153,111	9.19%	289,837	3.97%	125,158
2033	539,316	89	130,715	2,861	3,067,474	3,254,010	3,067,474	3,254,010	8.91%	289,796	4.02%	130,715
2034	279,390	60	136,349	1,938	3,199,683	3,358,139	3,199,683	3,358,139	8.63%	289,767	4.06%	136,349

<sup>1</sup> Net of the separately funded liability for recent benefit increases.

<sup>2</sup> Net of member contributions.

<sup>3</sup> Net of the amortization amounts for separately funded benefit increases.

## West Virginia Teachers' Retirement System

Table 4

**Funding Progress of Unfunded Actuarial Accrued Liability Under  
Current Funding Policy  
(000 omitted)**

FY Ending 6/30	(1) Unfunded AAL BOY <sup>1</sup>	(2) Interest on Unfunded @ 7.5 %	(3) MOY Contribution Toward Unfunded <sup>2</sup>	(4) Unfunded Funding Progress (3)x1.03682 - (2)
2008	3,446,624	258,497	300,000	52,550
2009	3,394,074	254,556	289,707	45,819
2010	3,348,255	251,119	289,707	49,256
2011	3,299,000	247,425	289,707	52,950
2012	3,246,050	243,454	289,707	56,921
2013	3,189,129	239,185	289,707	61,190
2014	3,127,939	234,595	289,707	65,780
2015	3,062,160	229,662	289,707	70,713
2016	2,991,447	224,359	289,707	76,016
2017	2,915,431	218,657	289,707	81,718
2018	2,833,714	212,529	289,707	87,846
2019	2,745,868	205,940	289,707	94,435
2020	2,651,433	198,857	289,707	101,518
2021	2,549,916	191,244	289,707	109,131
2022	2,440,785	183,059	289,707	117,316
2023	2,323,469	174,260	289,707	126,115
2024	2,197,355	164,802	289,707	135,573
2025	2,061,782	154,634	289,707	145,741
2026	1,916,041	143,703	289,707	156,672
2027	1,759,369	131,953	289,707	168,422
2028	1,590,947	119,321	289,707	181,054
2029	1,409,893	105,742	289,707	194,633
2030	1,215,260	91,145	289,707	209,230
2031	1,006,030	75,452	289,707	224,923
2032	781,108	58,583	289,707	241,792
2033	539,316	40,449	289,707	259,926
2034	279,390	20,954	289,707	279,421

<sup>1</sup> Net of the separately funded liability for recent benefit increases.

<sup>2</sup> Net of employer contribution toward normal cost and separately funded benefit increases.

West Virginia Teachers' Retirement System

Table 5

Cash Flow Projection FY2008 Through FY2034

FY Ending 6/30	(1)	(2)	(3)	(4)	(5)	(6)
	Assets Beg. of Year	Expected Contributions	Benefits	Earnings	Net Income	Assets End of Year
2008	3,665,993,000	395,198,000	451,737,000	272,868,000	216,329,000	3,882,322,000
2009	3,882,322,000	375,851,000	478,773,000	287,384,000	184,462,000	4,066,784,000
2010	4,066,784,000	381,459,000	507,423,000	300,371,000	174,407,000	4,241,191,000
2011	4,241,191,000	387,431,000	535,970,000	312,620,000	164,081,000	4,405,272,000
2012	4,405,272,000	393,758,000	564,572,000	324,106,000	153,292,000	4,558,564,000
2013	4,558,564,000	396,616,000	593,984,000	334,625,000	137,257,000	4,695,821,000
2014	4,695,821,000	403,722,000	621,585,000	344,164,000	126,301,000	4,822,122,000
2015	4,822,122,000	411,210,000	646,347,000	353,001,000	117,864,000	4,939,986,000
2016	4,939,986,000	419,024,000	667,721,000	361,341,000	112,644,000	5,052,630,000
2017	5,052,630,000	427,200,000	685,642,000	369,431,000	110,989,000	5,163,619,000
2018	5,163,619,000	435,763,000	700,549,000	377,521,000	112,735,000	5,276,354,000
2019	5,276,354,000	444,662,000	711,367,000	385,906,000	119,201,000	5,395,555,000
2020	5,395,555,000	453,865,000	718,024,000	394,940,000	130,781,000	5,526,336,000
2021	5,526,336,000	463,359,000	720,663,000	405,001,000	147,697,000	5,674,033,000
2022	5,674,033,000	473,205,000	719,076,000	416,499,000	170,628,000	5,844,661,000
2023	5,844,661,000	483,564,000	713,920,000	429,867,000	199,511,000	6,044,172,000
2024	6,044,172,000	494,510,000	705,028,000	445,561,000	235,043,000	6,279,215,000
2025	6,279,215,000	505,818,000	692,449,000	464,069,000	277,438,000	6,556,653,000
2026	6,556,653,000	517,388,000	676,918,000	485,875,000	326,345,000	6,882,998,000
2027	6,882,998,000	529,156,000	658,804,000	511,451,000	381,803,000	7,264,801,000
2028	7,264,801,000	541,121,000	638,228,000	541,284,000	444,177,000	7,708,978,000
2029	7,708,978,000	553,334,000	615,764,000	575,875,000	513,445,000	8,222,423,000
2030	8,222,423,000	565,784,000	591,826,000	615,723,000	589,681,000	8,812,104,000
2031	8,812,104,000	578,490,000	566,520,000	661,349,000	673,319,000	9,485,423,000
2032	9,485,423,000	591,471,000	540,213,000	713,294,000	764,552,000	10,249,975,000
2033	10,249,975,000	604,731,000	513,495,000	772,108,000	863,344,000	11,113,319,000
2034	11,113,319,000	618,213,000	486,488,000	838,349,000	970,074,000	12,083,393,000

## West Virginia Teachers' Retirement System

Table 6

## GASB-25 and GASB-27 Supplementary Disclosure Information as of June 30, 2007

Government Accounting Standards Board Statements 25 and 27 set forth certain items of required supplementary information to be disclosed in the financial statement of the System and the employer. The following information is intended to be used for this purpose in conjunction with other information prepared by the auditor.

## 1. Number of Members as of June 30, 2007

Group	Number
Retirees, disabled retirees and beneficiaries currently receiving benefits	28,040
Terminated employees entitled to benefits but not yet receiving benefits	3,259
Terminated employees entitled to a return of employee contributions	358
Active Plan members	
Vested	14,654
Nonvested	4,875
<b>Total</b>	<b>51,186</b>

## 2. Schedule of Funding Progress (000 omitted)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Liability - Entry Age (AL) (b)	Unfunded Liability (UAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAL as a Percentage of Covered Payroll (b-a)/(c)
6/30/97	\$ 683,807	\$ 4,161,039	\$3,477,232	16.4%	\$ 924,529	376.1%
6/30/98	\$ 839,597	\$ 4,262,797	\$3,423,200	19.7%	\$ 878,364	389.7%
6/30/99	\$ 932,501	\$ 4,629,276	\$3,696,775	20.1%	\$ 891,165	414.8%
6/30/00	\$ 1,046,840	\$ 4,883,064	\$3,836,224	21.4%	\$ 874,166	438.8%
6/30/01	\$ 1,090,663	\$ 5,188,826	\$4,098,163	21.0%	\$ 867,018	472.7%
6/30/02	\$ 1,098,441	\$ 5,709,001	\$4,610,560	19.2%	\$ 841,627	547.8%
6/30/03*	\$ 1,191,238	\$ 6,243,834	\$5,052,596	19.1%	\$ 832,919	606.6%
6/30/04	\$ 1,427,475	\$ 6,440,738	\$5,013,263	22.2%	\$ 784,415	639.1%
6/30/05	\$ 1,627,355	\$ 6,617,708	\$4,990,353	24.6%	\$ 735,614	678.4%
6/30/06	\$ 2,174,464	\$ 6,877,872	\$4,703,408	31.6%	\$ 759,206	619.5%
6/30/07	\$ 3,665,993	\$ 7,142,711	\$3,476,718	51.3%	\$ 828,939	419.4%

\* The 6/30/03 assets have been changed to reflect the final audited financial statements which were unavailable at the issuance of the July 1, 2003 valuation report.



3. The information presented in the required supplementary schedules was determined as part of the actuarial valuation at July 1, 2007. Additional information follows.

Valuation date	7/1/2007
Actuarial cost method	Entry age
Amortization method	Level dollar amount
Remaining amortization period	27 years
Asset valuation method	Market value
Actuarial assumptions:	
Investment rate of return	7.5%
Projected salary increases	
Teachers	3.5% - 5.0%
Non Teachers	3.6% - 5.5%
Inflation rate	3.0%

## West Virginia Teachers' Retirement System

Table 7

Valuation Assets as of June 30, 2007  
(000 omitted)

Assets	<u>June 30, 2007</u>	<u>June 30, 2006</u>
Cash with State Treasurer	\$ -	\$ -
Investments at Fair Value	3,638,376	2,079,390
Contributions Receivable	19,667	85,460
Participant Loans Receivable	7,363	9,077
Miscellaneous Revenue Receivable	622	614
Total Assets	<u>\$ 3,666,028</u>	<u>\$ 2,174,541</u>
Liabilities		
Accrued Expenses and other Payables	<u>35</u>	<u>77</u>
 Net Assets for Pension Benefits	 \$ 3,665,993	 \$ 2,174,464

## West Virginia Teachers' Retirement System

Table 8

**Statement of Changes in Net Assets for Benefits  
For Year ended June 30, 2007  
(000 omitted)**

Net Assets for Pension Benefits - Beginning of Year	\$ 2,174,464
<b>Additions</b>	
Contributions	
Member Type 1	43,152
Member Type 3	6,771
Employer Type 1	25,925
Employer Type 3	2,696
School Aid Formula	324,215
Special Appropriations	313,817
Tobacco Securitization	807,544
WVU Severance Plan	631
Special Contribution 2006 Retiree Incr	7,987
§33-3-14(d) Fees	2,545
Subtotal	<u>1,535,283</u>
Investment Income	
Net Appreciation in Fair Value <sup>1</sup>	344,824
Interest	21,817
Subtotal	<u>366,641</u>
Other Income	1,223
Total	<u>1,903,147</u>
<b>Deductions and Transfers</b>	
Benefit Expense	404,875
Refunds of Contributions	3,326
Administrative Expenses	2,968
Transfers (to)/from plans	449
Total	<u>411,618</u>
Net Increase	1,491,529
Net Assets for Pension Benefits - End of Year	\$ 3,665,993
<b>Investment Return for Year:</b>	
Valuation purposes (assumes mid-year transactions and offsets investment income by investment and administrative expenses) <sup>2</sup>	16.76%
Per Investment Management Board (time-weighted, excluding administrative expense)	17.40%

<sup>1</sup> Net of Investment Expense<sup>2</sup> Special Appropriations and Tobacco Securitization assumed to be paid at end of year.

## West Virginia Teachers' Retirement System

Table 9

## Reconciliation of Plan Participants

	Active	Retired	Beneficiaries	Vested Terms	Non-Vested Terms	Total
<b>Census as of July 1, 2006</b>	18,633	25,210	2,179	3,397	55	49,474
New Entrants	2,680	0	0	0	103	2,783
Returned to Active Status	34	0	0	(31)	(3)	0
Retired	(1,434)	1,556	0	(122)	0	0
Died	(30)	(988)	(117)	(12)	0	(1,147)
Terminated						
- Vested	(73)	0	0	73	0	0
- Non Vested	(203)	0	0	(5)	208	0
- Withdrew Contributions	(78)	0	0	(41)	(5)	(124)
New Beneficiaries	0	0	198	0	0	198
Transfers	0	0	0	0	0	0
Adjustments	0	2	0	0	0	2
<b>Census as of July 1, 2007</b>	19,529	25,780	2,260	3,259	358	51,186

## West Virginia Teachers' Retirement System

Table 10

## Summary of Membership

	<u>7/1/2007 Valuation</u>	<u>7/1/2006 Valuation</u>
<b>Active Members</b>		
Teachers	12,374	12,026
Non Teachers (including State)	7,155	6,607
<b>Total</b>	<u>19,529</u>	<u>18,633</u>
<b>Inactive Members</b>		
Retirees	23,696	23,172
Beneficiaries	2,260	2,179
Disabled Retirees	2,084	2,038
Vested Terminated	3,259	3,397
Nonvested Terminated	358	55
<b>Total</b>	<u>31,657</u>	<u>30,841</u>
<b>Total Members</b>	51,186	49,474

West Virginia  
Teachers' Retirement System  
Teachers

Table 11(a)

Number and Total Annual Compensation of Active Participants

Attained Age	Years of Credited Service													TOTAL No./ Tot. Comp.
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & up	No./ Comp.	No./ Comp.	No./ Comp.	No./ Comp.	
Under 25	No./ Comp. 337 10,355,911	No./ Comp. 0 0	No./ Comp. 0 0	No./ Comp. 0 0	No./ Comp. 0 0	No./ Comp. 0 0	No./ Comp. 0 0	No./ Comp. 0 0	No./ Comp. 0 0	No./ Comp. 0 0	No./ Comp. 0 0	No./ Comp. 0 0	No./ Comp. 0 0	337 10,355,911
25 to 29	No./ Comp. 974 31,603,256	No./ Comp. 0 0	No./ Comp. 0 0	No./ Comp. 0 0	No./ Comp. 0 0	No./ Comp. 0 0	No./ Comp. 0 0	No./ Comp. 0 0	No./ Comp. 0 0	No./ Comp. 0 0	No./ Comp. 0 0	No./ Comp. 0 0	No./ Comp. 0 0	974 31,603,256
30 to 34	No./ Comp. 422 14,108,306	No./ Comp. 1 38,557	No./ Comp. 0 0	No./ Comp. 0 0	No./ Comp. 0 0	No./ Comp. 0 0	No./ Comp. 0 0	No./ Comp. 0 0	No./ Comp. 0 0	No./ Comp. 0 0	No./ Comp. 0 0	No./ Comp. 0 0	No./ Comp. 0 0	422 14,108,306
35 to 39	No./ Comp. 374 12,762,676	No./ Comp. 0 0	No./ Comp. 17 764,796	No./ Comp. 213 10,054,452	No./ Comp. 181 9,046,199	No./ Comp. 2 89,302	No./ Comp. 0 0	No./ Comp. 0 0	No./ Comp. 0 0	No./ Comp. 0 0	No./ Comp. 0 0	No./ Comp. 0 0	No./ Comp. 0 0	374 12,762,676
40 to 44	No./ Comp. 238 7,876,754	No./ Comp. 8 355,856	No./ Comp. 10 486,900	No./ Comp. 141 6,770,256	No./ Comp. 661 33,508,073	No./ Comp. 89,302 29,858,451	No./ Comp. 0 0	No./ Comp. 0 0	No./ Comp. 0 0	No./ Comp. 0 0	No./ Comp. 0 0	No./ Comp. 0 0	No./ Comp. 0 0	238 7,876,754
45 to 49	No./ Comp. 191 6,909,017	No./ Comp. 8 329,600	No./ Comp. 20 919,740	No./ Comp. 211 10,070,397	No./ Comp. 464 23,718,288	No./ Comp. 1,408 73,057,037	No./ Comp. 1 70,803	No./ Comp. 0 0	No./ Comp. 0 0	No./ Comp. 0 0	No./ Comp. 0 0	No./ Comp. 0 0	No./ Comp. 0 0	191 6,909,017
50 to 54	No./ Comp. 167 6,313,574	No./ Comp. 11 660,724	No./ Comp. 23 919,740	No./ Comp. 239 10,070,397	No./ Comp. 542 23,718,288	No./ Comp. 686 73,057,037	No./ Comp. 1,303 71,150,770	No./ Comp. 2 12,960	No./ Comp. 0 0	No./ Comp. 0 0	No./ Comp. 0 0	No./ Comp. 0 0	No./ Comp. 0 0	167 6,313,574
55 to 59	No./ Comp. 128 5,060,754	No./ Comp. 13 558,870	No./ Comp. 23 1,133,164	No./ Comp. 239 11,790,109	No./ Comp. 542 27,832,282	No./ Comp. 686 36,397,788	No./ Comp. 1,243 70,526,577	No./ Comp. 558 33,105,074	No./ Comp. 0 0	No./ Comp. 0 0	No./ Comp. 0 0	No./ Comp. 0 0	No./ Comp. 0 0	128 5,060,754
60 to 64	No./ Comp. 38 1,604,384	No./ Comp. 9 419,886	No./ Comp. 12 615,008	No./ Comp. 84 4,131,540	No./ Comp. 165 8,460,375	No./ Comp. 164 8,652,148	No./ Comp. 147 8,503,656	No./ Comp. 193 1,850,393	No./ Comp. 43 2,697,934	No./ Comp. 0 0	No./ Comp. 0 0	No./ Comp. 0 0	No./ Comp. 0 0	38 1,604,384
65 to 69	No./ Comp. 8 314,570	No./ Comp. 0 0	No./ Comp. 0 0	No./ Comp. 19 946,580	No./ Comp. 8 399,224	No./ Comp. 17 836,094	No./ Comp. 11 674,817	No./ Comp. 16 957,264	No./ Comp. 22 1,283,172	No./ Comp. 0 0	No./ Comp. 0 0	No./ Comp. 0 0	No./ Comp. 0 0	8 314,570
70 & up	No./ Comp. 1 14,112	No./ Comp. 0 0	No./ Comp. 0 0	No./ Comp. 3 151,590	No./ Comp. 2 111,358	No./ Comp. 2 130,020	No./ Comp. 5 299,595	No./ Comp. 7 439,670	No./ Comp. 13 786,467	No./ Comp. 0 0	No./ Comp. 0 0	No./ Comp. 0 0	No./ Comp. 0 0	1 14,112
TOTAL	No./ Comp. 2,878 96,863,316	No./ Comp. 50 2,163,493	No./ Comp. 74 3,535,121	No./ Comp. 927 44,679,720	No./ Comp. 2,023 103,075,759	No./ Comp. 2,858 149,020,840	No./ Comp. 2,710 131,205,988	No./ Comp. 776 46,474,161	No./ Comp. 78 4,317,473	No./ Comp. 0 0	No./ Comp. 0 0	No./ Comp. 0 0	No./ Comp. 0 0	2,878 96,863,316

West Virginia  
Teachers' Retirement System  
Nonteachers (Including State Employees)

Table 11(b)

Number and Total Annual Compensation of Active Participants

Attained Age	Years of Credited Service													TOTAL No./ Tot. Comp.
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & up	No./ Comp.	No./ Comp.	No./ Comp.	No./ Comp.	
Under 25	60 1,218,030	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	60 1,218,030
25 to 29	172 3,727,257	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	172 3,727,257
30 to 34	213 4,369,371	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	213 4,369,371
35 to 39	320 6,371,686	0 0	0 0	25 844,750	3 114,093	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	320 6,371,686
40 to 44	389 7,855,792	1 69,374	2 62,180	116 3,753,296	104 3,858,920	16 636,866	0 0	0 0	0 0	0 0	0 0	0 0	0 0	389 7,855,792
45 to 49	316 6,050,229	2 45,954	2 51,806	164 5,124,016	249 8,973,960	336 12,868,468	39 1,477,827	0 0	0 0	0 0	0 0	0 0	0 0	316 6,050,229
50 to 54	265 5,504,370	2 88,980	12 428,964	255 7,999,605	348 11,992,080	397 16,094,374	320 13,569,600	34 1,320,404	0 0	0 0	0 0	0 0	0 0	265 5,504,370
55 to 59	170 3,324,800	4 17,068	7 218,568	301 9,003,512	484 16,106,068	462 17,151,750	253 11,179,817	121 5,494,655	6 19,688	6 19,688	6 19,688	6 19,688	6 19,688	170 3,324,800
60 to 64	73 1,397,197	1 20,590	4 93,996	168 5,085,528	202 6,704,784	230 8,144,990	124 4,789,624	55 2,355,785	16 648,112	16 648,112	16 648,112	16 648,112	16 648,112	73 1,397,197
65 to 69	15 310,425	0 0	0 0	43 1,128,320	43 1,399,779	39 1,376,037	28 1,018,304	24 876,240	17 869,446	17 869,446	17 869,446	17 869,446	17 869,446	15 310,425
70 & up	4 73,166	0 0	0 0	19 446,348	9 227,943	18 620,334	16 583,696	16 479,232	21 1,087,039	21 1,087,039	21 1,087,039	21 1,087,039	21 1,087,039	4 73,166
TOTAL	1,997 39,922,763	10 351,966	27 855,514	1,091 33,385,375	1,442 49,377,627	1,498 56,892,813	780 32,618,868	250 10,926,116	60 2,802,480	60 2,802,480	60 2,802,480	60 2,802,480	60 2,802,480	1,997 39,922,763

West Virginia  
Teachers' Retirement System

Table 12  
Distribution of the Number and Average Monthly Benefits  
of Retired Participants by Fifth Age as of July 1, 2007

Current Age	Service Retirees & Beneficiaries		Disabled Retirees		Total	
	Number	Avg. Mo. Benefit	Number	Avg. Mo. Benefit	Number	Avg. Mo. Benefit
35	37	723	0	0	37	723
40	22	632	16	466	38	562
45	37	872	58	850	95	858
50	106	1,178	222	903	328	992
55	2,158	2,331	505	1,001	2,663	2,079
60	4,203	1,983	565	889	4,768	1,853
65	4,626	1,494	390	665	5,016	1,429
70	4,267	1,169	148	556	4,415	1,148
75	3,972	985	76	438	4,048	975
80	3,069	842	60	421	3,129	834
85	2,012	701	30	375	2,042	696
90	1,032	603	14	313	1,046	599
95 and over	415	519	0	0	415	519
Total	25,956	1,318	2,084	807	28,040	1,280



**West Virginia  
Teachers' Retirement System**

**Table 13**

**Distribution of the Number and Average Monthly Benefits  
of Participants Entitled to Deferred Benefits by Fifth Age as of July 1, 2007**

Current Age	Total	
	Number	Avg. Mo. Benefit
30	0	0
35	4	290
40	326	305
45	932	384
50	852	605
55	772	685
60	299	618
65	50	520
70	20	309
75	4	482
80 and over	0	0
<b>Total</b>	<b>3,259</b>	<b>528</b>

- A. **Plan Name:** The State Teachers' Retirement System
  
- B. **Effective Date:** The State Teachers' Retirement System was originally enacted effective July 1, 1941.
  
- C. **Member:** Membership includes any employee hired before July 1991, or on or after July 1, 2005, in the public schools, state institutions of higher education, certain state departments, and the Board of Regents. Members of the Teachers' Defined Contribution ("TDC") Plan or TIAA-CREF are not eligible for TRS.
  
- D. **Final Average Salary:** Final Average Salary is the average of the Member's 5 highest fiscal years of total earnings from covered employment during the Member's last 15 years of service.
  
- E. **Credited Service:** Credited Service is granted for each day the Member performs work and contributes to the System. At most one year of Credited Service may be earned in any one school year. Credited Service may be granted under certain guidelines for other State employment, for military service, and for out-of-state teaching service.
  - 1. **Contributory Service:** Service credited for years in which a Member contributes to the retirement system. Contributory service is counted for both eligibility and benefit determination.
  
  - 2. **Military Service:** Active service in the U.S. military up to one-fourth of the amount of a Member's Contributory Service (but not more than 10 years) will be counted for both eligibility and benefit determination under the retirement system.
  
  - 3. **Purchased Service:** Service in parochial school or with other states' teacher retirement systems may count for benefits (but not eligibility), provided that the

Member pays TRS double the amount contributed during the first year of employment times the number of years credited plus interest, and cashes out his/her rights to any future benefits under his prior retirement system.

4. **Unused Leave:** A retiring member may choose to receive pension credited service for days of sick or annual leave unused at the time of retirement. Credited Service is granted at the rate of twice the actual number of unused days.

## **F. Contributions**

1. **Member Contributions:** Members contribute 6% of their pay to the retirement system.
2. **Employer Contributions:** The State of West Virginia and its counties contribute directly to TRS at the following rates:
  - The State contributes (1) 15.0% of the payroll of State-employed Members, (2) 15% of School Aid Formula ("SAF") covered payroll of county-employed Members, (3) 7.5% of SAF-covered payroll of members of the TDC Plan, (4) a certain percentage of fire insurance premiums paid by state residents, and (5) under Code §18-9-A-6a, beginning in Fiscal 1996, an amount determined by the State Actuary as being needed to eliminate the TRS Unfunded Liability within 40 years of June 30, 1994.
  - Counties contribute 15.0% of the payroll of TRS Members hired before July 1, 1991 and 7.5% of the payroll of TRS Members hired on or after July 1, 2005 employed by county boards of education, which is not covered under the School Aid Formula.

**G. Service Retirement**

1. **Eligibility:** A Member may retire with an unreduced pension (1) at any age with 35 years of Credited Service, or (2) at age 60 with 5 years of Credited Service. A member may retire with 30 years of Credited Service at any age, with the pension reduced actuarially if the Member retires before age 55.
2. **Benefit:** The normal form of benefit is a single life annuity paid monthly, in an amount equal to 2% of Final Average Salary times years of Credited Service. Other forms of benefit may be elected, subject to actuarial reduction, including a Cash Refund Annuity, 50% or 100% Contingent Joint and Survivor Annuities, and a 10 Year Certain and Life Annuity.

**H. Disability Retirement**

1. **Eligibility:** A Member may be eligible to receive a disability retirement benefit after completing 10 years of Credited Service, if the Member is disabled for 6 months, unable to perform his or her regular occupation and the Retirement Board expects the disability to be permanent.
2. **Benefit:** An annual disability benefit amount, payable monthly as a Cash Refund Annuity, is equal to 2% of the Member's Final Average Salary times the total years of Credited Service to date of disability.

**I. Pre-Retirement Death Benefits**

1. **Eligibility:** The surviving spouse of a deceased Member who had attained age 50 and completed 25 years of Credited Service is eligible for the Surviving Spouse Benefit. If a member dies prior to attaining age 50 or completing 25 years of Credited Service a Lump Sum Death Benefit is payable to the beneficiary.

**2. Benefit:**

- ***Surviving Spouse Benefit:*** The surviving spouse receives an annuity payable as if the Member had retired on the date of death with a 100% Joint and Survivor pension.
- ***Lump Sum Death Benefit:*** The sum of the accumulated Member and employer contributions with interest is paid to the Member's beneficiary (or estate).

**J. Refund of Contributions**

1. ***Eligibility:*** A Member who leaves employment and is not eligible for any other benefit will receive a refund of his or her contributions to the retirement system.
2. ***Benefit:*** A lump sum of the Member's accumulated contributions, with compound interest computed on any contributed amount from the end of the fiscal year in which contributed to the date of distribution of the lump sum (but in no case beyond 5 years after the end of the fiscal year during which the Member left service). For purposes of this benefit, interest is computed at a 3% annual rate.

**K. Deferred Vested Benefit**

1. ***Eligibility:*** A Member leaving employment with 5 years of Contributory Service may elect to receive either a refund of contributions or a deferred pension commencing at age 62. If a Member has 20 years of Contributory Service, the deferral age is age 60.
2. ***Benefit:*** An annuity defined as described under "Service Retirement".

**L. Post-Retirement Cost-of-Living Adjustments**

*Ad hoc* cost-of-living increases in pensions are periodically granted by the State Legislature. However, the retirement system makes no automatic provision for such increases.

Effective July 1, 2001 retirees age 65 and over who were retired for at least 5 years received a percentage increase in benefits as follows:

- Eligible retirees age 65 to age 70 received a 5% increase, and
- Eligible retirees over age 70 received a 10% increase.

However, if the retiree originally retired under an early retirement window the percentage increase was limited to 3%.

Effective July 1, 2006, retirees age 70 and over who were retired for at least 5 years received a 3% increase in retirement benefits.

**A. Valuation Date**

July 1, 2007

**B. Funding Method**

The valuation is prepared under the Entry Age Cost Method with individually computed accrued liabilities. The Normal Cost is computed in aggregate. Entry is based on adjusted date of hire, i.e., valuation date minus known past service.

**C. Interest Rate and Expenses**

The valuation interest assumption is 7.5 % per annum, with no loading for plan expenses.

**D. Mortality**

Mortality rates are shown in the Appendix and are based on the results of the 2002-2006 experience study.

The mortality tables are as follows:

Healthy males: 1983 GAM male

Healthy females: 1983 GAM female set forward 1 year

Disabled males: Revenue ruling 96-7 disabled male table set back 3 years

Disabled females: Revenue ruling 96-7 disabled female table set back 3 years

**E. Salary Scales**

Salary scales are shown in the Appendix and are based on the 2002 - 2006 experience study.

Projected Salary increases are in the following ranges by group:

	<u>Range of Projected Salary Increases</u>
Teachers	3.50% - 5.00%
Non Teachers	3.60% - 5.50%

The underlying inflation rate is 3.0%.

**F. Withdrawal from Service**

Withdrawal rates are shown in the Appendix and are based on the 2002-2006 experience study.

Withdrawal rates are assumed to cease upon eligibility for retirement. All withdrawal is assumed to result in refund of contributions if nonvested or a deferred annuity if vested.

**G. Disablement Rates**

Disablement rates are shown in the Appendix and are based on the 2002-2006 experience study.



**H. Family Composition**

It is assumed that 85% of males and 80% of females are married, with husbands 3 years older than wives. Remarriage rates are not used.

**I. Accrual of Future Service**

Active members will accrue the following service for each future year of employment. The future service accrual factors are based on the 2002-2006 experience study.

<u>Group</u>	<u>Males</u>	<u>Females</u>
Teachers	.99	.985
Nonteachers	.99	.99

**J. Noncontributory Service Loadings**

The load factor assumptions for noncontributory service (military, parochial or out-of-state teaching, transferred PERS service and unused sick leave) are based on the 2002-2006 experience study and are as follows:

**Noncontributory Service Load Factors**

<u>Group</u>	<u>Males</u>	<u>Females</u>
Teachers	1.095	1.0375
Nonteachers	1.0775	1.030

**K. Retirement Rates**

Retirement rates are shown in the Appendix and are based on the 2002-2006 experience study.

**L. Asset Valuation Method**

Assets for valuation purposes are included at Market Value.

**M. Plan Contribution**

Plan Contributions, both employee and employer, are assumed to be paid in the middle of the year.

**Pre & Post-Retirement Healthy Mortality  
1983 Group Annuity Mortality Male  
1983 Group Annuity Mortality Female set forward 1 year**

<u>Age</u>	<u>Male</u>	<u>Female</u>	<u>Age</u>	<u>Male</u>	<u>Female</u>	<u>Age</u>	<u>Male</u>	<u>Female</u>
19	0.00037	0.00019	50	0.00391	0.00179	80	0.07407	0.04766
20	0.00038	0.00020	51	0.00432	0.00195	81	0.08148	0.05269
21	0.00039	0.00021	52	0.00476	0.00212	82	0.08932	0.05807
22	0.00041	0.00023	53	0.00520	0.00232	83	0.09753	0.06381
23	0.00042	0.00024	54	0.00566	0.00254	84	0.10605	0.06992
24	0.00044	0.00025	55	0.00613	0.00280	85	0.11484	0.07657
25	0.00046	0.00027	56	0.00662	0.00310	86	0.12417	0.08387
26	0.00049	0.00028	57	0.00714	0.00344	87	0.13387	0.09194
27	0.00051	0.00030	58	0.00772	0.00382	88	0.14407	0.10135
28	0.00054	0.00032	59	0.00838	0.00424	89	0.15486	0.11175
29	0.00057	0.00034	60	0.00916	0.00470	90	0.16631	0.12308
30	0.00061	0.00036	61	0.01006	0.00521	91	0.17821	0.13563
31	0.00065	0.00039	62	0.01113	0.00577	92	0.19046	0.14958
32	0.00069	0.00041	63	0.01239	0.00639	93	0.20301	0.16510
33	0.00073	0.00044	64	0.01387	0.00706	94	0.21790	0.18242
34	0.00079	0.00048	65	0.01559	0.00782	95	0.23409	0.20176
35	0.00086	0.00050	66	0.01758	0.00868	96	0.24844	0.22204
36	0.00091	0.00054	67	0.01980	0.00970	97	0.26395	0.24390
37	0.00097	0.00057	68	0.02223	0.01092	98	0.28080	0.26819
38	0.00104	0.00062	69	0.02482	0.01239	99	0.29915	0.29519
39	0.00113	0.00067	70	0.02753	0.01413	100	0.31919	0.32523
40	0.00124	0.00072	71	0.03035	0.01616	101	0.34109	0.35890
41	0.00137	0.00078	72	0.03337	0.01848	102	0.36505	0.39584
42	0.00153	0.00084	73	0.03668	0.02109	103	0.39310	0.43836
43	0.00172	0.00092	74	0.04039	0.02399	104	0.42726	0.48782
44	0.00193	0.00101	75	0.04460	0.02719	105	0.46953	0.54589
45	0.00218	0.00112	76	0.04939	0.03067	106	0.52195	0.61431
46	0.00247	0.00124	77	0.05476	0.03446	107	0.58652	0.69489
47	0.00279	0.00137	78	0.06068	0.03855	108	0.66527	0.78947
48	0.00314	0.00151	79	0.06713	0.04295	109	0.76022	1.00000
49	0.00351	0.00165				110	1.00000	1.00000

**Pre & Post-Retirement Disabled Mortality  
Revenue Ruling 96-7 Disabled Mortality Table set back 3 years**

<u>Age</u>	<u>Male</u>	<u>Female</u>	<u>Age</u>	<u>Male</u>	<u>Female</u>	<u>Age</u>	<u>Male</u>	<u>Female</u>
19	0.02250	0.00812	50	0.04499	0.02550	80	0.09563	0.06869
20	0.02300	0.00848	51	0.04599	0.02630	81	0.09922	0.07224
21	0.02352	0.00885	52	0.04699	0.02712	82	0.10303	0.07616
22	0.02404	0.00924	53	0.04800	0.02796	83	0.10711	0.08048
23	0.02458	0.00965	54	0.04902	0.02883	84	0.11152	0.08524
24	0.02513	0.01008	55	0.05004	0.02973	85	0.11628	0.09048
25	0.02570	0.01052	56	0.05107	0.03066	86	0.12146	0.09622
26	0.02627	0.01098	57	0.05209	0.03161	87	0.12711	0.10251
27	0.02686	0.01147	58	0.05312	0.03259	88	0.13326	0.10937
28	0.02746	0.01197	59	0.05414	0.03361	89	0.13997	0.11684
29	0.02807	0.01250	60	0.05509	0.03466	90	0.14729	0.12495
30	0.02870	0.01306	61	0.05607	0.03573	91	0.15527	0.13374
31	0.02935	0.01363	62	0.05708	0.03685	92	0.16394	0.14323
32	0.03000	0.01423	63	0.05812	0.03799	93	0.17336	0.15348
33	0.03066	0.01484	64	0.05917	0.03918	94	0.18359	0.16450
34	0.03133	0.01547	65	0.06023	0.04040	95	0.19465	0.17633
35	0.03201	0.01610	66	0.06130	0.04165	96	0.20662	0.18901
36	0.03269	0.01660	67	0.06243	0.04295	97	0.21952	0.20257
37	0.03341	0.01712	68	0.06367	0.04429	98	0.23409	0.21705
38	0.03418	0.01765	69	0.06508	0.04567	99	0.24844	0.23247
39	0.03498	0.01820	70	0.06672	0.04683	100	0.26395	0.24887
40	0.03580	0.01877	71	0.06864	0.04807	101	0.28080	0.26629
41	0.03663	0.01936	72	0.07083	0.04958	102	0.29915	0.28476
42	0.03749	0.01996	73	0.07328	0.05133	103	0.31919	0.30343
43	0.03837	0.02058	74	0.07598	0.05327	104	0.34109	0.32739
44	0.03927	0.02122	75	0.07890	0.05536	105	0.36505	0.35902
45	0.04019	0.02188	76	0.08207	0.05757	106	0.39310	0.39584
46	0.04112	0.02256	77	0.08561	0.05998	107	0.42726	0.43836
47	0.04207	0.02326	78	0.08892	0.06257	108	0.46953	0.48782
48	0.04303	0.02399	79	0.09221	0.06548	109	0.52195	0.54589
49	0.04401	0.02473				110	0.58652	0.61431

**Teachers Salary Scale (Male & Female)**

<u>Age</u>		<u>Age</u>		<u>Age</u>	
19	1.05000	37	1.04150	54	1.03600
20	1.05000	38	1.04100	55	1.03600
21	1.04950	39	1.04050	56	1.03600
22	1.04900	40	1.04000	57	1.03600
23	1.04850	41	1.03960	58	1.03600
24	1.04800	42	1.03920	59	1.03600
25	1.04750	43	1.03880	60	1.03600
26	1.04700	44	1.03840	61	1.03600
27	1.04650	45	1.03800	62	1.03600
28	1.04600	46	1.03760	63	1.03600
29	1.04550	47	1.03720	64	1.03600
30	1.04500	48	1.03680	65	1.03600
31	1.04450	49	1.03640	66	1.03580
32	1.04400	50	1.03600	67	1.03560
33	1.04350	51	1.03600	68	1.03540
34	1.04300	52	1.03600	69	1.03520
35	1.04250	53	1.03600	70	1.03500
36	1.04200				

**Nonteachers and State Salary Scale (Male & Female)**

<u>Age</u>		<u>Age</u>		<u>Age</u>	
19	1.05500	37	1.05075	54	1.04216
20	1.05500	38	1.05050	55	1.04160
21	1.05475	39	1.05025	56	1.04104
22	1.05450	40	1.05000	57	1.04048
23	1.05425	41	1.04944	58	1.03992
24	1.05400	42	1.04888	59	1.03936
25	1.05375	43	1.04832	60	1.03880
26	1.05350	44	1.04776	61	1.03824
27	1.05325	45	1.04720	62	1.03768
28	1.05300	46	1.04664	63	1.03712
29	1.05275	47	1.04608	64	1.03656
30	1.05250	48	1.04552	65	1.03600
31	1.05225	49	1.04496	66	1.03600
32	1.05200	50	1.04400	67	1.03600
33	1.05175	51	1.04384	68	1.03600
34	1.05150	52	1.04328	69	1.03600
35	1.05125	53	1.04272	70	1.03600
36	1.05100				

**Teachers Withdrawal Decrements (less than 1 year)**

<u>Age</u>	<u>Male</u>	<u>Female</u>	<u>Age</u>	<u>Male</u>	<u>Female</u>	<u>Age</u>	<u>Male</u>	<u>Female</u>
19	0.15000	0.15000	36	0.11800	0.11800	53	0.08400	0.08400
20	0.15000	0.15000	37	0.11600	0.11600	54	0.08200	0.08200
21	0.14800	0.14800	38	0.11400	0.11400	55	0.08000	0.08000
22	0.14600	0.14600	39	0.11200	0.11200	56	0.07800	0.07800
23	0.14400	0.14400	40	0.11000	0.11000	57	0.07600	0.07600
24	0.14200	0.14200	41	0.10800	0.10800	58	0.07400	0.07400
25	0.14000	0.14000	42	0.10600	0.10600	59	0.07200	0.07200
26	0.13800	0.13800	43	0.10400	0.10400	60	0.07000	0.07000
27	0.13600	0.13600	44	0.10200	0.10200	61	0.07000	0.07000
28	0.13400	0.13400	45	0.10000	0.10000	62	0.07000	0.07000
29	0.13200	0.13200	46	0.09800	0.09800	63	0.07000	0.07000
30	0.13000	0.13000	47	0.09600	0.09600	64	0.07000	0.07000
31	0.12800	0.12800	48	0.09400	0.09400	65	0.07000	0.07000
32	0.12600	0.12600	49	0.09200	0.09200	66	0.07000	0.07000
33	0.12400	0.12400	50	0.09000	0.09000	67	0.07000	0.07000
34	0.12200	0.12200	51	0.08800	0.08800	68	0.07000	0.07000
35	0.12000	0.12000	52	0.08600	0.08600	69	0.07000	0.07000

**Teachers Withdrawal Decrements (1 to 2 years)**

<u>Age</u>	<u>Male</u>	<u>Female</u>	<u>Age</u>	<u>Male</u>	<u>Female</u>	<u>Age</u>	<u>Male</u>	<u>Female</u>
19	0.13000	0.13000	36	0.09600	0.09600	53	0.06000	0.06000
20	0.13000	0.13000	37	0.09200	0.09200	54	0.06000	0.06000
21	0.12800	0.12800	38	0.08800	0.08800	55	0.06000	0.06000
22	0.12600	0.12600	39	0.08400	0.08400	56	0.05800	0.05800
23	0.12400	0.12400	40	0.08000	0.08000	57	0.05600	0.05600
24	0.12200	0.12200	41	0.07800	0.07800	58	0.05400	0.05400
25	0.12000	0.12000	42	0.07600	0.07600	59	0.05200	0.05200
26	0.11800	0.11800	43	0.07400	0.07400	60	0.05000	0.05000
27	0.11600	0.11600	44	0.07200	0.07200	61	0.05000	0.05000
28	0.11400	0.11400	45	0.07000	0.07000	62	0.05000	0.05000
29	0.11200	0.11200	46	0.06800	0.06800	63	0.05000	0.05000
30	0.11000	0.11000	47	0.06600	0.06600	64	0.05000	0.05000
31	0.10800	0.10800	48	0.06400	0.06400	65	0.05000	0.05000
32	0.10600	0.10600	49	0.06200	0.06200	66	0.05000	0.05000
33	0.10400	0.10400	50	0.06000	0.06000	67	0.05000	0.05000
34	0.10200	0.10200	51	0.06000	0.06000	68	0.05000	0.05000
35	0.10000	0.10000	52	0.06000	0.06000	69	0.05000	0.05000

**Teachers Withdrawal Decrements (2 to 3 years)**

<u>Age</u>	<u>Male</u>	<u>Female</u>	<u>Age</u>	<u>Male</u>	<u>Female</u>	<u>Age</u>	<u>Male</u>	<u>Female</u>
19	0.10000	0.10000	36	0.06700	0.06700	53	0.04000	0.04000
20	0.10000	0.10000	37	0.06400	0.06400	54	0.04000	0.04000
21	0.10000	0.10000	38	0.06100	0.06100	55	0.04000	0.04000
22	0.10000	0.10000	39	0.05800	0.05800	56	0.04000	0.04000
23	0.10000	0.10000	40	0.05500	0.05500	57	0.04000	0.04000
24	0.10000	0.10000	41	0.05200	0.05200	58	0.04000	0.04000
25	0.10000	0.10000	42	0.04900	0.04900	59	0.04000	0.04000
26	0.09700	0.09700	43	0.04600	0.04600	60	0.04000	0.04000
27	0.09400	0.09400	44	0.04300	0.04300	61	0.04000	0.04000
28	0.09100	0.09100	45	0.04000	0.04000	62	0.04000	0.04000
29	0.08800	0.08800	46	0.04000	0.04000	63	0.04000	0.04000
30	0.08500	0.08500	47	0.04000	0.04000	64	0.04000	0.04000
31	0.08200	0.08200	48	0.04000	0.04000	65	0.04000	0.04000
32	0.07900	0.07900	49	0.04000	0.04000	66	0.04000	0.04000
33	0.07600	0.07600	50	0.04000	0.04000	67	0.04000	0.04000
34	0.07300	0.07300	51	0.04000	0.04000	68	0.04000	0.04000
35	0.07000	0.07000	52	0.04000	0.04000	69	0.04000	0.04000

**Teachers Withdrawal Decrements (3 to 4 years)**

<u>Age</u>	<u>Male</u>	<u>Female</u>	<u>Age</u>	<u>Male</u>	<u>Female</u>	<u>Age</u>	<u>Male</u>	<u>Female</u>
19	0.08000	0.08000	36	0.05200	0.05200	53	0.03000	0.03000
20	0.08000	0.08000	37	0.04900	0.04900	54	0.03000	0.03000
21	0.08000	0.08000	38	0.04600	0.04600	55	0.03000	0.03000
22	0.08000	0.08000	39	0.04300	0.04300	56	0.03000	0.03000
23	0.08000	0.08000	40	0.04000	0.04000	57	0.03000	0.03000
24	0.08000	0.08000	41	0.03800	0.03800	58	0.03000	0.03000
25	0.08000	0.08000	42	0.03600	0.03600	59	0.03000	0.03000
26	0.07600	0.07600	43	0.03400	0.03400	60	0.03000	0.03000
27	0.07200	0.07200	44	0.03200	0.03200	61	0.03000	0.03000
28	0.06800	0.06800	45	0.03000	0.03000	62	0.03000	0.03000
29	0.06400	0.06400	46	0.03000	0.03000	63	0.03000	0.03000
30	0.06000	0.06000	47	0.03000	0.03000	64	0.03000	0.03000
31	0.05900	0.05900	48	0.03000	0.03000	65	0.03000	0.03000
32	0.05800	0.05800	49	0.03000	0.03000	66	0.03000	0.03000
33	0.05700	0.05700	50	0.03000	0.03000	67	0.03000	0.03000
34	0.05600	0.05600	51	0.03000	0.03000	68	0.03000	0.03000
35	0.05500	0.05500	52	0.03000	0.03000	69	0.03000	0.03000

**Teachers Withdrawal Decrements (4 to 5 years)**

<u>Age</u>	<u>Male</u>	<u>Female</u>	<u>Age</u>	<u>Male</u>	<u>Female</u>	<u>Age</u>	<u>Male</u>	<u>Female</u>
19	0.06000	0.06000	36	0.03200	0.03200	53	0.01500	0.01500
20	0.06000	0.06000	37	0.02900	0.02900	54	0.01500	0.01500
21	0.06000	0.06000	38	0.02600	0.02600	55	0.01500	0.01500
22	0.06000	0.06000	39	0.02300	0.02300	56	0.01500	0.01500
23	0.06000	0.06000	40	0.02000	0.02000	57	0.01500	0.01500
24	0.06000	0.06000	41	0.02000	0.02000	58	0.01500	0.01500
25	0.06000	0.06000	42	0.02000	0.02000	59	0.01500	0.01500
26	0.05600	0.05600	43	0.02000	0.02000	60	0.01500	0.01500
27	0.05200	0.05200	44	0.02000	0.02000	61	0.01500	0.01500
28	0.04800	0.04800	45	0.02000	0.02000	62	0.01500	0.01500
29	0.04400	0.04400	46	0.01900	0.01900	63	0.01500	0.01500
30	0.04000	0.04000	47	0.01800	0.01800	64	0.01500	0.01500
31	0.03900	0.03900	48	0.01700	0.01700	65	0.01500	0.01500
32	0.03800	0.03800	49	0.01600	0.01600	66	0.01500	0.01500
33	0.03700	0.03700	50	0.01500	0.01500	67	0.01500	0.01500
34	0.03600	0.03600	51	0.01500	0.01500	68	0.01500	0.01500
35	0.03500	0.03500	52	0.01500	0.01500	69	0.01500	0.01500

**Teachers Withdrawal Decrements (greater than 5 years)**

<u>Age</u>	<u>Male</u>	<u>Female</u>	<u>Age</u>	<u>Male</u>	<u>Female</u>	<u>Age</u>	<u>Male</u>	<u>Female</u>
19	0.04000	0.04000	36	0.02676	0.02400	53	0.01800	0.01300
20	0.04000	0.04000	37	0.02602	0.02300	54	0.01900	0.01400
21	0.03900	0.03900	38	0.02528	0.02200	55	0.02000	0.01500
22	0.03800	0.03800	39	0.02454	0.02100	56	0.02000	0.01500
23	0.03700	0.03700	40	0.02380	0.02000	57	0.02000	0.01500
24	0.03600	0.03600	41	0.02304	0.01900	58	0.02000	0.01500
25	0.03500	0.03500	42	0.02228	0.01800	59	0.02000	0.01500
26	0.03400	0.03400	43	0.02152	0.01700	60	0.02000	0.01500
27	0.03300	0.03300	44	0.02076	0.01600	61	0.02000	0.01500
28	0.03200	0.03200	45	0.02000	0.01500	62	0.02000	0.01500
29	0.03100	0.03100	46	0.01900	0.01400	63	0.02000	0.01500
30	0.03000	0.03000	47	0.01800	0.01300	64	0.02000	0.01500
31	0.02950	0.02900	48	0.01700	0.01200	65	0.02000	0.01500
32	0.02900	0.02800	49	0.01600	0.01100	66	0.02000	0.01500
33	0.02850	0.02700	50	0.01500	0.01000	67	0.02000	0.01500
34	0.02800	0.02600	51	0.01600	0.01100	68	0.02000	0.01500
35	0.02750	0.02500	52	0.01700	0.01200	69	0.02000	0.01500



**Nonteachers and State Withdrawal Decrements (less than 1 year)**

<u>Age</u>	<u>Male</u>	<u>Female</u>	<u>Age</u>	<u>Male</u>	<u>Female</u>	<u>Age</u>	<u>Male</u>	<u>Female</u>
19	0.15000	0.15000	36	0.11800	0.11800	53	0.08400	0.08400
20	0.15000	0.15000	37	0.11600	0.11600	54	0.08200	0.08200
21	0.14800	0.14800	38	0.11400	0.11400	55	0.08000	0.08000
22	0.14600	0.14600	39	0.11200	0.11200	56	0.07800	0.07800
23	0.14400	0.14400	40	0.11000	0.11000	57	0.07600	0.07600
24	0.14200	0.14200	41	0.10800	0.10800	58	0.07400	0.07400
25	0.14000	0.14000	42	0.10600	0.10600	59	0.07200	0.07200
26	0.13800	0.13800	43	0.10400	0.10400	60	0.07000	0.07000
27	0.13600	0.13600	44	0.10200	0.10200	61	0.07000	0.07000
28	0.13400	0.13400	45	0.10000	0.10000	62	0.07000	0.07000
29	0.13200	0.13200	46	0.09800	0.09800	63	0.07000	0.07000
30	0.13000	0.13000	47	0.09600	0.09600	64	0.07000	0.07000
31	0.12800	0.12800	48	0.09400	0.09400	65	0.07000	0.07000
32	0.12600	0.12600	49	0.09200	0.09200	66	0.07000	0.07000
33	0.12400	0.12400	50	0.09000	0.09000	67	0.07000	0.07000
34	0.12200	0.12200	51	0.08800	0.08800	68	0.07000	0.07000
35	0.12000	0.12000	52	0.08600	0.08600	69	0.07000	0.07000

**Nonteachers and State Withdrawal Decrements (1 to 2 years)**

<u>Age</u>	<u>Male</u>	<u>Female</u>	<u>Age</u>	<u>Male</u>	<u>Female</u>	<u>Age</u>	<u>Male</u>	<u>Female</u>
19	0.13000	0.13000	36	0.09600	0.09600	53	0.06000	0.06000
20	0.13000	0.13000	37	0.09200	0.09200	54	0.06000	0.06000
21	0.12800	0.12800	38	0.08800	0.08800	55	0.06000	0.06000
22	0.12600	0.12600	39	0.08400	0.08400	56	0.05800	0.05800
23	0.12400	0.12400	40	0.08000	0.08000	57	0.05600	0.05600
24	0.12200	0.12200	41	0.07800	0.07800	58	0.05400	0.05400
25	0.12000	0.12000	42	0.07600	0.07600	59	0.05200	0.05200
26	0.11800	0.11800	43	0.07400	0.07400	60	0.05000	0.05000
27	0.11600	0.11600	44	0.07200	0.07200	61	0.05000	0.05000
28	0.11400	0.11400	45	0.07000	0.07000	62	0.05000	0.05000
29	0.11200	0.11200	46	0.06800	0.06800	63	0.05000	0.05000
30	0.11000	0.11000	47	0.06600	0.06600	64	0.05000	0.05000
31	0.10800	0.10800	48	0.06400	0.06400	65	0.05000	0.05000
32	0.10600	0.10600	49	0.06200	0.06200	66	0.05000	0.05000
33	0.10400	0.10400	50	0.06000	0.06000	67	0.05000	0.05000
34	0.10200	0.10200	51	0.06000	0.06000	68	0.05000	0.05000
35	0.10000	0.10000	52	0.06000	0.06000	69	0.05000	0.05000

**Nonteachers and State Withdrawal Decrements (2 to 3 years)**

<u>Age</u>	<u>Male</u>	<u>Female</u>	<u>Age</u>	<u>Male</u>	<u>Female</u>	<u>Age</u>	<u>Male</u>	<u>Female</u>
19	0.10000	0.10000	36	0.06700	0.06700	53	0.04000	0.04000
20	0.10000	0.10000	37	0.06400	0.06400	54	0.04000	0.04000
21	0.10000	0.10000	38	0.06100	0.06100	55	0.04000	0.04000
22	0.10000	0.10000	39	0.05800	0.05800	56	0.04000	0.04000
23	0.10000	0.10000	40	0.05500	0.05500	57	0.04000	0.04000
24	0.10000	0.10000	41	0.05200	0.05200	58	0.04000	0.04000
25	0.10000	0.10000	42	0.04900	0.04900	59	0.04000	0.04000
26	0.09700	0.09700	43	0.04600	0.04600	60	0.04000	0.04000
27	0.09400	0.09400	44	0.04300	0.04300	61	0.04000	0.04000
28	0.09100	0.09100	45	0.04000	0.04000	62	0.04000	0.04000
29	0.08800	0.08800	46	0.04000	0.04000	63	0.04000	0.04000
30	0.08500	0.08500	47	0.04000	0.04000	64	0.04000	0.04000
31	0.08200	0.08200	48	0.04000	0.04000	65	0.04000	0.04000
32	0.07900	0.07900	49	0.04000	0.04000	66	0.04000	0.04000
33	0.07600	0.07600	50	0.04000	0.04000	67	0.04000	0.04000
34	0.07300	0.07300	51	0.04000	0.04000	68	0.04000	0.04000
35	0.07000	0.07000	52	0.04000	0.04000	69	0.04000	0.04000

**Nonteachers and State Withdrawal Decrements (3 to 4 years)**

<u>Age</u>	<u>Male</u>	<u>Female</u>	<u>Age</u>	<u>Male</u>	<u>Female</u>	<u>Age</u>	<u>Male</u>	<u>Female</u>
19	0.08000	0.08000	36	0.05200	0.05200	53	0.03000	0.03000
20	0.08000	0.08000	37	0.04900	0.04900	54	0.03000	0.03000
21	0.08000	0.08000	38	0.04600	0.04600	55	0.03000	0.03000
22	0.08000	0.08000	39	0.04300	0.04300	56	0.03000	0.03000
23	0.08000	0.08000	40	0.04000	0.04000	57	0.03000	0.03000
24	0.08000	0.08000	41	0.03800	0.03800	58	0.03000	0.03000
25	0.08000	0.08000	42	0.03600	0.03600	59	0.03000	0.03000
26	0.07600	0.07600	43	0.03400	0.03400	60	0.03000	0.03000
27	0.07200	0.07200	44	0.03200	0.03200	61	0.03000	0.03000
28	0.06800	0.06800	45	0.03000	0.03000	62	0.03000	0.03000
29	0.06400	0.06400	46	0.03000	0.03000	63	0.03000	0.03000
30	0.06000	0.06000	47	0.03000	0.03000	64	0.03000	0.03000
31	0.05900	0.05900	48	0.03000	0.03000	65	0.03000	0.03000
32	0.05800	0.05800	49	0.03000	0.03000	66	0.03000	0.03000
33	0.05700	0.05700	50	0.03000	0.03000	67	0.03000	0.03000
34	0.05600	0.05600	51	0.03000	0.03000	68	0.03000	0.03000
35	0.05500	0.05500	52	0.03000	0.03000	69	0.03000	0.03000

## Nonteachers and State Withdrawal Decrements (4 to 5 years)

<u>Age</u>	<u>Male</u>	<u>Female</u>	<u>Age</u>	<u>Male</u>	<u>Female</u>	<u>Age</u>	<u>Male</u>	<u>Female</u>
19	0.06000	0.06000	36	0.03800	0.03800	53	0.02000	0.02000
20	0.06000	0.06000	37	0.03600	0.03600	54	0.02000	0.02000
21	0.05800	0.05800	38	0.03400	0.03400	55	0.02000	0.02000
22	0.05600	0.05600	39	0.03200	0.03200	56	0.01900	0.01900
23	0.05400	0.05400	40	0.03000	0.03000	57	0.01800	0.01800
24	0.05200	0.05200	41	0.02900	0.02900	58	0.01700	0.01700
25	0.05000	0.05000	42	0.02800	0.02800	59	0.01600	0.01600
26	0.05000	0.05000	43	0.02700	0.02700	60	0.01500	0.01500
27	0.05000	0.05000	44	0.02600	0.02600	61	0.01500	0.01500
28	0.05000	0.05000	45	0.02500	0.02500	62	0.01500	0.01500
29	0.05000	0.05000	46	0.02400	0.02400	63	0.01500	0.01500
30	0.05000	0.05000	47	0.02300	0.02300	64	0.01500	0.01500
31	0.04800	0.04800	48	0.02200	0.02200	65	0.01500	0.01500
32	0.04600	0.04600	49	0.02100	0.02100	66	0.01500	0.01500
33	0.04400	0.04400	50	0.02000	0.02000	67	0.01500	0.01500
34	0.04200	0.04200	51	0.02000	0.02000	68	0.01500	0.01500
35	0.04000	0.04000	52	0.02000	0.02000	69	0.01500	0.01500

## Nonteachers and State Withdrawal Decrements (greater than 5 years)

<u>Age</u>	<u>Male</u>	<u>Female</u>	<u>Age</u>	<u>Male</u>	<u>Female</u>	<u>Age</u>	<u>Male</u>	<u>Female</u>
19	0.04000	0.04000	36	0.02150	0.03100	53	0.01400	0.01952
20	0.04000	0.04000	37	0.02050	0.02950	54	0.01450	0.01976
21	0.03900	0.03950	38	0.01950	0.02800	55	0.01500	0.02000
22	0.03800	0.03900	39	0.01850	0.02650	56	0.01500	0.02000
23	0.03700	0.03850	40	0.01750	0.02500	57	0.01500	0.02000
24	0.03600	0.03800	41	0.01700	0.02400	58	0.01500	0.02000
25	0.03500	0.03750	42	0.01650	0.02300	59	0.01500	0.02000
26	0.03400	0.03700	43	0.01600	0.02200	60	0.01500	0.02000
27	0.03300	0.03650	44	0.01550	0.02100	61	0.01500	0.02000
28	0.03200	0.03600	45	0.01500	0.02000	62	0.01500	0.02000
29	0.03100	0.03550	46	0.01450	0.01976	63	0.01500	0.02000
30	0.03000	0.03500	47	0.01400	0.01952	64	0.01500	0.02000
31	0.02850	0.03450	48	0.01350	0.01928	65	0.01500	0.02000
32	0.02700	0.03400	49	0.01300	0.01904	66	0.01500	0.02000
33	0.02550	0.03350	50	0.01250	0.01880	67	0.01500	0.02000
34	0.02400	0.03300	51	0.01300	0.01904	68	0.01500	0.02000
35	0.02250	0.03250	52	0.01350	0.01928	69	0.01500	0.02000

**Teachers, Nonteachers and State  
Disability Decrements (Male and Female)**

<u>Age</u>	<u>Male</u>	<u>Female</u>	<u>Age</u>	<u>Male</u>	<u>Female</u>	<u>Age</u>	<u>Male</u>	<u>Female</u>
19	0.00000	0.00000	33	0.00160	0.00160	47	0.00372	0.00368
20	0.00010	0.00010	34	0.00180	0.00180	48	0.00408	0.00402
21	0.00018	0.00018	35	0.00200	0.00200	49	0.00444	0.00436
22	0.00026	0.00026	36	0.00210	0.00210	50	0.00480	0.00470
23	0.00034	0.00034	37	0.00220	0.00220	51	0.00524	0.00516
24	0.00042	0.00042	38	0.00230	0.00230	52	0.00568	0.00562
25	0.00050	0.00050	39	0.00240	0.00240	53	0.00612	0.00608
26	0.00060	0.00060	40	0.00250	0.00250	54	0.00656	0.00654
27	0.00070	0.00070	41	0.00260	0.00260	55	0.00700	0.00700
28	0.00080	0.00080	42	0.00270	0.00270	56	0.00780	0.00780
29	0.00090	0.00090	43	0.00280	0.00280	57	0.00860	0.00860
30	0.00100	0.00100	44	0.00290	0.00290	58	0.00940	0.00940
31	0.00120	0.00120	45	0.00300	0.00300	59	0.01020	0.01020
32	0.00140	0.00140	46	0.00336	0.00334	60	0.01100	0.01100
						61	0.00000	0.00000
						and older		

**Retirement Rates**

<u>Age</u>	<u>Teachers</u>		<u>Nonteachers &amp; State</u>	
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>
54	0.000	0.000	0.000	0.000
55	0.250	0.225	0.200	0.200
56	0.150	0.175	0.150	0.150
57	0.150	0.175	0.150	0.150
58	0.150	0.175	0.150	0.150
59	0.150	0.175	0.150	0.150
60	0.300	0.250	0.150	0.250
61	0.350	0.200	0.150	0.275
62	0.400	0.250	0.400	0.300
63	0.250	0.200	0.200	0.200
64	0.250	0.250	0.200	0.200
65	0.400	0.300	0.400	0.300
66	0.300	0.300	0.200	0.200
67	0.300	0.300	0.200	0.200
68	0.300	0.300	0.200	0.200
69	0.300	0.300	0.200	0.200
70	1.000	1.000	1.000	1.000
and older				