



**West Virginia
Public Employees Retirement System**

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

Prepared by:

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an ACS company A C S

for the

West Virginia Consolidated Public Retirement Board

December 2007



January 2, 2008

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

Re: West Virginia Public Employees' 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 Public Employees' Retirement System as of July 1, 2007. This valuation presents the annual cost and related liabilities of the Plan as of the valuation date.

The valuation indicates that the expected state contributions of 10.5% of payroll plus the member contributions of 4.5% of payroll continues to be sufficient in meeting the annual funding requirement of the plan.

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 and the external auditor's report.

This report presents fairly the actuarial position of the West Virginia Public Employees' Retirement System 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 PERS experience and represent our best estimate of anticipated experience under PERS.

Respectfully submitted,

Peter D. Verne
Principal and Consulting Actuary

PDV/esb

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This report presents the results of the July 1, 2007 actuarial valuation of the West Virginia Public Employees' Retirement System. The development of the results, including for comparison purposes the previous year's results as of July 1, 2006, is presented in Table 1. 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 Public Employees' Retirement System (PERS) is a defined benefit plan providing unreduced monthly benefits to members upon retirement at age 60 after completing 5 years of service, or retirement on or after age 55 and meeting the rule of 80. 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 employer contributions, currently at 10½% of payroll, and member contributions of 4½% of payroll. The major purpose of the valuation is to determine the adequacy of the expected contributions with respect to funding expected Plan liabilities.

The valuation indicates that current contribution levels exceed the calculated cost to fund the benefits accruing during the year (the normal cost) plus the amount required to amortize at a level dollar amount the Plan's primary unfunded liability originally established as of July 1, 2005 over a 28-year period (30 years from July 1, 2005), the amount required to amortize the liability for benefit improvements to actives under SB173 over a 9-year period (10 years from July 1, 2006), and the amount required to amortize the liability for retiree improvements under HB4846 over a 5-year period (6 years from July 1, 2006).

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. The calculated Employer cost is determined as the Employer's share of the normal cost (the cost to fund benefits accruing during the year), plus amortization of the unfunded actuarial liability segments over the specified periods.

Table 2a presents a projection of the primary unfunded actuarial accrued liability to June 30, 2035. The primary unfunded actuarial accrued liability at the valuation date is approximately \$130 million. This table illustrates the expected pattern of change in the unfunded liability over the remaining 28-year period. Table 2b presents a projection of the unfunded liability for benefit improvements to actives under SB173 to June 30, 2016. Table 2c presents a projection of the unfunded liability for retiree improvements under HB4846 to June 30, 2012.

Table 3 presents a cash flow projection of expected asset balances, contributions, disbursements and earnings over the period to FY2033.

Funding Progress

The measures of funding status used by accountants for both the State's and the Plan's financial statements are presented in Table 4, which contains information required under Governmental Accounting Standards Board Statement Numbers 25 and 27 (GASB-25 and GASB-27).

Plan asset information is presented in Tables 5 and 6.

Plan Membership

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

	<u>7/1/07</u>	<u>7/1/06</u>
Actives	35,873	35,689
Retirees & Beneficiaries	20,514	20,026
Terminated Vested	3,658	3,551
Terminated Nonvested	<u>9,762</u>	<u>9,012</u>
Total recognized in the valuation	69,807	68,278

Table 7 presents a reconciliation of plan membership over the year and Table 8 presents supplemental information on plan membership. Table 9a and 9b shows the number and total compensation for state and non-state active participants by five-year age and service groupings as of July 1, 2007. Table 10 shows the number and average monthly benefits of regular retirees and beneficiaries, and disabled retirees included in the valuation distributed by fifth age, while Table 11 shows a similar distribution for terminated participants entitled to deferred benefits.

Table 1
Development of Valuation Results and Comparison to Prior Year
(000 omitted)

	July 1, 2007	July 1, 2006
Membership		
Active	35,873	35,689
Inactive	33,934	32,589
Total	69,807	68,278
1. Present Value of Future Benefits		
a. Active	\$ 3,271,928	\$ 3,185,081
b. Inactive - Retirees	1,601,848	1,475,948
- Disabled Retirees	158,592	153,949
- Beneficiaries	199,642	190,020
- Vested Terminated	82,870	79,614
- Non-Vested Terminated	7,592	6,836
c. Total	5,322,472	5,091,448
2. Actuarial Accrued Liability	4,426,051	4,264,700
3. Assets (Market Value)	4,293,296	3,700,186
4. Unfunded Actuarial Accrued Liability (2) - (3)	132,755	564,514
a. Primary Unfunded	128,565	558,626
b. Improvements for actives per SB 173	131	141
c. Retirement increase per HB 4846	4,059	5,747
5. Annual Normal Cost Rate		
a. Present Value of Future Normal Cost (1c)-(2)	896,421	826,748
b. Present Value of Future Payroll	9,010,578	8,910,520
c. Normal Cost Rate as a % of Payroll (5a)/(5b)	9.95%	9.28%
d. Employee Contribution Rate	4.50%	4.50%
e. Employer Share of Normal Cost	5.45%	4.78%
f. Valuation Compensation FY 2008(2007)	1,191,130	1,159,715
6. Calculated Employer Cost FY 2008(2007)		
a. Amortization Payment on UAAL MOY ¹	10,714	46,065
b. Amortization Payment on SB 173 MOY ²	20	20
c. Amortization Payment on HB 4846 MOY ³	968	1,181
d. Employer Normal Cost MOY	67,307	57,476
e. Total Employer Cost MOY	79,009	104,742
f. Employer Cost as Percentage of Compensation	6.63%	9.03%
7. Expected Employer Contributions FY 2008(2007)		
a. Employer Contribution Rate	10.50%	10.50%
b. Employer Contribution	125,069	121,770

¹ FY 2008, amortization payment is over 28 years, 30 years from July 1, 2005

² FY 2008, amortization payment is over 9 years, 10 years from July 1, 2006

³ FY 2008, amortization payment is over 5 years, 6 years from July 1, 2006

Table 2a

**Projection of Unfunded Accrued Liability and Annual Contributions
Primary Unfunded Liability Established July 1, 2005**

Fiscal Year Ending 6/30	Unfunded Liability at Beg. of Year	Projected Total Payroll	Employer Contributions	
			% of Payroll	Amount
2008	128,565,000	1,191,130,000	0.90%	10,714,000
2009	127,099,000	1,250,687,000	0.86%	10,714,000
2010	125,523,000	1,313,221,000	0.82%	10,714,000
2011	123,828,000	1,378,882,000	0.78%	10,714,000
2012	122,007,000	1,447,826,000	0.74%	10,714,000
2013	120,049,000	1,520,217,000	0.70%	10,714,000
2014	117,944,000	1,596,228,000	0.67%	10,714,000
2015	115,682,000	1,676,040,000	0.64%	10,714,000
2016	113,249,000	1,759,842,000	0.61%	10,714,000
2017	110,634,000	1,847,834,000	0.58%	10,714,000
2018	107,823,000	1,940,225,000	0.55%	10,714,000
2019	104,802,000	2,037,237,000	0.53%	10,714,000
2020	101,553,000	2,139,098,000	0.50%	10,714,000
2021	98,061,000	2,246,053,000	0.48%	10,714,000
2022	94,307,000	2,358,356,000	0.45%	10,714,000
2023	90,272,000	2,476,274,000	0.43%	10,714,000
2024	85,934,000	2,600,087,000	0.41%	10,714,000
2025	81,270,000	2,730,092,000	0.39%	10,714,000
2026	76,257,000	2,866,596,000	0.37%	10,714,000
2027	70,868,000	3,009,926,000	0.36%	10,714,000
2028	65,074,000	3,160,422,000	0.34%	10,714,000
2029	58,846,000	3,318,444,000	0.32%	10,714,000
2030	52,151,000	3,484,366,000	0.31%	10,714,000
2031	44,954,000	3,658,584,000	0.29%	10,714,000
2032	37,217,000	3,841,513,000	0.28%	10,714,000
2033	28,900,000	4,033,589,000	0.27%	10,714,000
2034	19,959,000	4,235,268,000	0.25%	10,714,000
2035	10,348,000	4,447,032,000	0.24%	10,714,000

Table 2b

**Projection of Unfunded Accrued Liability and Annual Contributions
Liability for Improvements for actives per SB 173 Established July 1, 2006**

Fiscal Year Ending 6/30	Unfunded Liability at Beg. of Year	Projected Total Payroll	Employer Contributions	
			% of Payroll	Amount
2008	131,000	1,191,130,000	0.00%	20,000
2009	120,000	1,250,687,000	0.00%	20,000
2010	108,000	1,313,221,000	0.00%	20,000
2011	96,000	1,378,882,000	0.00%	20,000
2012	82,000	1,447,826,000	0.00%	20,000
2013	67,000	1,520,217,000	0.00%	20,000
2014	52,000	1,596,228,000	0.00%	20,000
2015	35,000	1,676,040,000	0.00%	20,000
2016	17,000	1,759,842,000	0.00%	20,000

Table 2c

**Projection of Unfunded Accrued Liability and Annual Contributions
Liability for Retirement increase per HB 4846 established July 1, 2006**

Fiscal Year Ending 6/30	Unfunded Liability at Beg. of Year	Projected Total Payroll	Employer Contributions	
			% of Payroll	Amount
2008	4,059,000	1,191,130,000	0.08%	968,000
2009	3,360,000	1,250,687,000	0.08%	968,000
2010	2,608,000	1,313,221,000	0.07%	968,000
2011	1,800,000	1,378,882,000	0.07%	968,000
2012	932,000	1,447,826,000	0.07%	968,000

Table 3
West Virginia Public Employees' Retirement System
Cash Flow Projection FY 2008 Through FY 2033

FY	(1)	(2)	(3)	(4)	(5)	(6)
Ending 6/30	Assets Beg. of Year	Expected Contributions	Benefits	Earnings	Net Income	Assets End of Year
2008	4,293,296,000	178,670,000	248,358,000	319,384,000	249,696,000	4,542,992,000
2009	4,542,992,000	187,604,000	255,527,000	338,177,000	270,254,000	4,813,246,000
2010	4,813,246,000	196,984,000	270,543,000	358,235,000	284,676,000	5,097,922,000
2011	5,097,922,000	206,833,000	286,657,000	379,351,000	299,527,000	5,397,449,000
2012	5,397,449,000	217,175,000	304,357,000	401,539,000	314,357,000	5,711,806,000
2013	5,711,806,000	228,034,000	322,895,000	424,828,000	329,967,000	6,041,773,000
2014	6,041,773,000	239,436,000	342,003,000	449,287,000	346,720,000	6,388,493,000
2015	6,388,493,000	251,408,000	361,407,000	475,012,000	365,013,000	6,753,506,000
2016	6,753,506,000	263,978,000	380,675,000	502,137,000	385,440,000	7,138,946,000
2017	7,138,946,000	277,177,000	400,427,000	530,799,000	407,549,000	7,546,495,000
2018	7,546,495,000	291,036,000	419,663,000	561,164,000	432,537,000	7,979,032,000
2019	7,979,032,000	305,588,000	437,995,000	593,462,000	461,055,000	8,440,087,000
2020	8,440,087,000	320,867,000	455,672,000	627,951,000	493,146,000	8,933,233,000
2021	8,933,233,000	336,910,000	471,931,000	664,929,000	529,908,000	9,463,141,000
2022	9,463,141,000	353,756,000	487,055,000	704,737,000	571,438,000	10,034,579,000
2023	10,034,579,000	371,444,000	501,383,000	747,721,000	617,782,000	10,652,361,000
2024	10,652,361,000	390,016,000	514,496,000	794,259,000	669,779,000	11,322,140,000
2025	11,322,140,000	409,517,000	525,871,000	844,797,000	728,443,000	12,050,583,000
2026	12,050,583,000	429,993,000	535,957,000	899,820,000	793,856,000	12,844,439,000
2027	12,844,439,000	451,493,000	545,183,000	959,820,000	866,130,000	13,710,569,000
2028	13,710,569,000	474,068,000	552,649,000	1,025,346,000	946,765,000	14,657,334,000
2029	14,657,334,000	497,771,000	558,557,000	1,097,021,000	1,036,235,000	15,693,569,000
2030	15,693,569,000	522,660,000	563,334,000	1,175,492,000	1,134,818,000	16,828,387,000
2031	16,828,387,000	548,793,000	566,397,000	1,261,469,000	1,243,865,000	18,072,252,000
2032	18,072,252,000	576,233,000	568,038,000	1,355,726,000	1,363,921,000	19,436,173,000
2033	19,436,173,000	605,045,000	568,056,000	1,459,100,000	1,496,089,000	20,932,262,000

Assumed interest rate: 7.50%

Earnings: $[(1) + (2) - (3)]/2 \times \text{interest rate}$

Notes:

- The fund balance as of July 1, 2007 is the market value of the fund.
- The contribution for FY 2008 is determined as 1.0% of anticipated FY 2008 base pay (4.5% Member contributions, 10.5% State contributions). Thereafter, the contribution is assumed to increase at 5.0% per year to reflect the salary increase assumption. No new entrants are assumed in this projection.
- The projection of future benefit payments is based on all participants included in the valuation, including active and terminated vested participants who are not yet receiving benefits.

Table 4

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 and June 30, 2006

Group	June 30, 2007	June 30, 2006
Retirees, disabled retirees and beneficiaries currently receiving benefits	20,514	20,026
Terminated employees entitled to benefits but not yet receiving benefits	3,658	3,551
Terminated employees entitled to a return of employee contributions	9,762	9,012
Active Plan members		
Vested	23,858	25,204
Non Vested	12,015	10,485
Total	69,807	68,278

2. Schedule of Funding Progress (000 omitted)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AL) - Entry Age (b)	Unfunded Accrued Liability (UAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAL as a Percentage of Covered Payroll (b-a)/(c)
6/30/97	\$ 2,152,300	\$ 2,371,752	\$ 219,452	90.7%	\$ 809,315	27.1%
6/30/98	\$ 2,371,359	\$ 2,524,214	\$ 152,855	93.9%	\$ 836,541	18.3%
6/30/99	\$ 2,504,001	\$ 2,681,756	\$ 177,755	93.4%	\$ 854,883	20.8%
6/30/00	\$ 2,700,356	\$ 2,932,484	\$ 232,128	92.1%	\$ 930,331	25.0%
6/30/01	\$ 2,681,395	\$ 3,178,037	\$ 496,642	84.4%	\$ 972,711	51.1%
6/30/02	\$ 2,588,777	\$ 3,432,467	\$ 843,690	75.4%	\$1,040,269	81.1%
6/30/03	\$ 2,699,941	\$ 3,691,001	\$ 991,060	73.1%	\$1,109,272	89.3%
6/30/04	\$ 3,095,660	\$ 3,870,201	\$ 774,541	80.0%	\$1,134,111	68.3%
6/30/05	\$ 3,404,651	\$ 4,074,385	\$ 669,734	83.6%	\$1,162,098	57.6%
6/30/06	\$ 3,700,186	\$ 4,264,700	\$ 564,514	86.8%	\$1,159,715	48.7%
6/30/07	\$ 4,293,296	\$ 4,426,051	\$ 132,755	97.0%	\$1,191,130	11.1%

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	7/1/07
Actuarial cost method	Entry age
Amortization method	Level dollar amount
Remaining amortization period	28 years
Asset valuation method	Market value
Actuarial assumptions:	
Investment rate of return	7.5%
Projected salary increases	
State	4.25% - 6.0%
Nonstate	3.75% - 5.5%
Inflation rate	3.0%

Table 5
Valuation Assets as of June 30, 2007
(000 omitted)

	<u>June 30, 2007</u>	<u>June 30, 2006</u>
Assets		
Cash with State Treasurer	\$ 185	\$ 16
Investments at Fair Value	4,289,067	3,696,027
Contributions Receivable	4,312	4,293
Participant Loans Receivable	0	0
Total Assets	<u>4,293,564</u>	<u>3,700,336</u>
Liabilities		
Accrued Expenses and other Payables	<u>268</u>	<u>150</u>
Net Assets for Pension Benefits	\$ 4,293,296	\$ 3,700,186

Table 6
Statement of Changes in Net Assets for Benefits
For Year ended June 30, 2007
(000 omitted)

Net Assets for Pension Benefits - Beginning of Year	\$	3,700,186
Additions		
Contributions		
Member		52,239
Employer		121,183
Special Appropriation (2006 Ret. Inc)		2,013
Subtotal		<u>175,435</u>
Investment Income		
Net Appreciation in Fair Value *		645,498
Interest		0
Subtotal		<u>645,498</u>
Other Income		2,587
Annuity Payable		0
Total		<u>823,520</u>
Deductions and Transfers		
Benefit Expense		217,540
Refunds of Contributions		9,216
Administrative Expenses		4,097
Transfers (to)/from plans		(443)
Total		<u>230,410</u>
Net Increase		593,110
Net Assets for Pension Benefits - End of Year	\$	4,293,296
Investment Return for Year:		
Valuation purposes (assumes mid-year transactions and offsets investment income by investment and administrative expense)		17.45%
Per Investment Management Board (time-weighted, excluding administrative expense)		17.60%
* Net of Investment Expense		

Table 7

Reconciliation of Plan Participants

	Active	Non-Vested Terms	Vested Terms	Retired	Beneficiaries	Total
Census as of July 1, 2006	35,689	9,012	3,551	16,302	3,724	68,278
New Entrants	3,391	651	4	0	0	4,046
Returned to Active Status	545	(365)	(172)	(8)	0	0
Retired	(973)	(13)	(143)	1,129	0	0
Died	(69)	(8)	(12)	(676)	(193)	(958)
Terminated						0
- Vested	(560)	(4)	564	0	0	0
- Non Vested	(730)	730	0	0	0	0
- Withdrew Contributions	(1,397)	(247)	(122)	0	0	(1,766)
- Transfer to Teachers		(1)				(1)
- Transfer to Judges						0
New Beneficiaries	0	0	0	0	244	244
QDRO's	0	0	0	0	0	0
Adjustments	(23)	7	(12)	(7)	(1)	(36)
Census as of July 1, 2007	35,873	9,762	3,658	16,740	3,774	69,807

Table 8
Summary of Membership and Payroll

	<u>7/1/2007</u> <u>Valuation</u>	<u>7/1/2006</u> <u>Valuation</u>
Active Members		
State Employees	23,242	23,342
Nonstate Employees	12,631	12,347
Total	<u>35,873</u>	<u>35,689</u>
Average Age	46.0	45.7
Average Service	11.4	11.5
Inactive Members		
Retirees	14,716	14,294
Beneficiaries	3,774	3,724
Disabled Retirees	2,024	2,008
Vested Terminated	3,658	3,551
Nonvested Terminated	9,762	9,012
Total	<u>33,934</u>	<u>32,589</u>
Payroll For Normal Cost		
State Employees	\$ 804,519,000	\$ 797,075,000
Nonstate Employees	386,610,000	362,640,000
Total	<u>\$ 1,191,129,000</u>	<u>\$ 1,159,715,000</u>
PV of Future Payroll	\$ 9,010,578,000	\$ 8,910,520,000
PV Member Contributions	\$ 405,476,000	\$ 400,973,000

TABLE 9a - STATE
NUMBER AND TOTAL ANNUAL COMPENSATION OF ACTIVE PARTICIPANTS

Attained Age	Years of Credited Service											Total No./		
	Under 1 No./	1 to 4 No./	5 to 9 No./	10 to 14 No./	15 to 19 No./	20 to 24 No./	25 to 29 No./	30 to 34 No./	35 to 39 No./	40 & up No./	Total No./			
Under 25	322	295	12	-	-	-	-	-	-	-	-	-	-	629
25 to 29	393	961	292	7	-	-	-	-	-	-	-	-	-	1,653
30 to 34	292	792	858	238	6	-	-	-	-	-	-	-	-	2,186
35 to 39	306	725	858	649	201	9	-	-	-	-	-	-	-	2,748
40 to 44	200	679	713	543	487	193	23	-	-	-	-	-	-	2,838
45 to 49	178	607	743	539	482	432	446	66	-	-	-	-	-	3,493
50 to 54	154	567	699	541	565	479	675	541	44	-	-	-	-	4,265
55 to 59	114	411	557	477	501	462	341	391	215	13	-	-	-	3,482
60 to 64	35	155	260	229	253	168	126	110	102	42	-	-	-	1,480
65 to 69	6	27	55	46	61	57	26	20	17	12	-	-	-	327
70 & up	1	10	11	18	21	21	18	17	9	15	-	-	-	141
Total	2,001	5,229	5,058	3,287	2,577	1,821	1,655	1,145	387	82	-	-	-	23,242

TABLE 9b - NON-STATE
NUMBER AND TOTAL ANNUAL COMPENSATION OF ACTIVE PARTICIPANTS

Attained Age	Years of Credited Service													Total No./	
	Under 1 No./	1 to 4 No./	5 to 9 No./	10 to 14 No./	15 to 19 No./	20 to 24 No./	25 to 29 No./	30 to 34 No./	35 to 39 No./	40 & up No./					
Under 25	166	268	9	-	-	-	-	-	-	-	-	-	-	-	443
25 to 29	179	550	175	13	-	-	-	-	-	-	-	-	-	-	917
30 to 34	118	491	382	116	3	-	-	-	-	-	-	-	-	-	1,110
35 to 39	169	524	456	259	137	5	-	-	-	-	-	-	-	-	1,550
40 to 44	120	443	428	251	228	121	15	-	-	-	-	-	-	-	1,606
45 to 49	126	437	428	328	285	217	165	12	-	-	-	-	-	-	1,998
50 to 54	112	413	348	326	256	207	240	126	14	-	-	-	-	-	2,042
55 to 59	67	311	323	253	292	185	155	91	41	3	-	-	-	-	1,721
60 to 64	33	156	152	129	124	85	65	38	24	8	-	-	-	-	814
65 to 69	18	54	45	42	38	23	16	11	7	9	-	-	-	-	263
70 & up	4	26	29	27	30	19	19	3	3	7	-	-	-	-	167
Total	1,112	3,673	2,775	1,744	1,393	862	675	281	89	27	-	-	-	-	12,631

TABLE 10
DISTRIBUTION OF THE NUMBER AND AVERAGE MONTHLY BENEFITS
OF RETIRED PARTICIPANTS AS OF JULY 1, 2007

Current Age	Service retirees		Beneficiaries		Disabled retirees		Total	
	Number	Average Monthly Benefit	Number	Average Monthly Benefit	Number	Average Monthly Benefit	Number	Average Monthly Benefit
Under 30	-	-	17	517	-	-	17	517
30-34	-	-	8	593	1	791	9	615
35-39	-	-	6	656	12	1,076	18	936
40-44	-	-	35	772	27	922	62	837
45-49	-	-	89	738	120	1,035	209	909
50-54	5	848	156	811	273	1,036	434	953
55-59	1,211	1,847	255	774	478	1,030	1,944	1,506
60-64	2,498	1,436	350	710	435	925	3,283	1,291
65-69	3,043	1,091	447	598	284	514	3,774	989
70-74	2,610	892	520	568	190	449	3,320	816
75-79	2,324	735	623	526	86	435	3,033	684
80-84	1,730	643	617	449	78	385	2,425	585
85-89	888	528	418	381	27	357	1,333	478
90-94	327	437	192	342	11	412	530	402
95 and over	80	394	41	420	2	425	123	403
Total	14,716	1,015	3,774	554	2,024	817	20,514	911
Total annual benefits	179,266,538	25,110,086	19,848,119	224,224,742				

TABLE 11

**DISTRIBUTION OF THE NUMBER AND AVERAGE
MONTHLY BENEFITS OF PARTICIPANTS ENTITLED
TO DEFERRED BENEFITS AS OF JULY 1, 2007**

Deferred Vested		
<u>Current Age</u>	<u>Number</u>	<u>Average Monthly Benefit</u>
Under 30	36	125
30-34	172	191
35-39	392	251
40-44	451	327
45-49	566	413
50-54	847	470
55-59	784	437
60-64	337	410
65-69	54	264
70-74	14	244
75-79	4	35
80-84	-	-
85-89	1	16
90-94	-	-
95 and over	-	-
Total	<u>3,658</u>	<u>387</u>

Total annual benefits

16,971,603

A. DEFINITIONS

1. **Plan Name:** The West Virginia Public Employees' Retirement System
2. **Effective Date:** The West Virginia Public Employees' Retirement Act was originally enacted March 11, 1961 to be effective July 1, 1961.
3. **Plan Membership:** All employees of the State of West Virginia or of any participating political subdivisions are required (with certain exceptions) to become plan members. Among those employees not eligible for plan membership are members (and retirees) of other State retirement systems, except for retirees from the Department of Public Safety or from municipal police or fire departments. Members of the State legislature and of local legislative bodies may elect plan membership regardless of the above exclusions.
4. **Annual Compensation:** Annual compensation is the total salary paid to a member by a participating employer, including overtime pay and non-cash payments.
5. **Final Average Salary:** Final average salary is the average of the member's annual compensation during the 3 consecutive years of his credited service (during the 10 years preceding the termination of his employment) that produces the highest such average. If the member has less than 3 years of credited service, his final average salary is his average annual compensation during his period of credit service. Special rules apply to members of the legislature.

B. CONTRIBUTIONS

1. **Member Contributions:** Members contribute 4½% of their salary to the system. Member contributions earn interest at a rate of 4%, compounded annually (3% prior to July 1, 1968).

2. **Employer Contributions:** The State and its participating political subdivisions contribute 10½% of members' compensation to the retirement system.

C. SERVICE CREDITS

1. **Prior Service:** Prior service is the period of employment credited to a member who worked for a participating employer before July 1, 1961. To receive credit for prior service, the employee must have worked for a participating employer within the 30-year period prior to July 1, 1961, and the employee must become a member of the system within 15 years of July 1, 1961 (or within 15 years of his employer's participation in the system, if later).
2. **Contributing Service:** Contributing service is the member's period of employment commencing on his date of participation in the plan.
3. **Credited Service:** Credited service is the sum of the member's prior service and his contributing service. Under certain circumstances, credited service may also be granted for periods of military service and for credited service under the West Virginia Teacher's Retirement System.
4. **Reinstated Service:** A member who terminates service with a participating employer, who does not retire and who is not eligible for a deferred vested benefit, will forfeit his credited service. If the member subsequently reenters covered employment and remains employed for at least 1 year, then his forfeited credited service will be reinstated -- provided that he repays to the fund any member contributions (with interest) that he withdrew upon termination. Such repayment must commence no later than 2 years following his reemployment, and full repayment must be accomplished within 5 years following his reemployment.

5. **Applied Unused Leave:** A retiring member may have his unused sick or annual leave applied as credited service to increase the amount of his pension, but cannot apply it for purposes of gaining eligibility for benefits. Credited service for this purpose is determined by first doubling the number of unused leave days so applied, and then each 240 days of (doubled) leave counts as 1 year of credited service in the benefit formula used to compute the amount of the member's pension.

D. NORMAL RETIREMENT BENEFIT

1. **Eligibility:** A member who has attained age 60 and has earned 5 or more years of contributing service is eligible for a normal retirement benefit.
2. **Benefit Amount:** The annual normal retirement benefit, payable in monthly installments, is equal to 2% of the member's final average salary *times* the number of years of his credited service.
3. **Normal Form of Benefit:** The normal form of the retirement benefit is a single life cash refund annuity. This means that the pension is payable only during the member's lifetime, but if he dies before receiving pension payments which total the amount of his accumulated contributions (with interest) at the time of his retirement, then the difference will be paid to his beneficiary.
4. **Optional Forms of Benefit:** The retiring member may instead of the "Normal Form" choose an actuarially reduced joint and survivor annuity with his or her spouse as beneficiary, with either 100% or 50% of the amount payable while both are alive continuing to the surviving spouse during the spouse's remaining lifetime. This is a contingent joint and survivor annuity, reducing in amount only upon the retiree's dying first (and not upon the spouse's death).

E. EARLY RETIREMENT BENEFIT (Unreduced)

1. **Eligibility:** Rule of 80; A member who has completed at least 3 years of contributing service and who has attained age 55 with the sum of his age *plus* years of contributing service equal to or greater than 80, may retire at any age on or after age 55.
2. **Amount:** The early retirement benefit is equal to the members normal retirement benefit based on final average salary and years of credited service as of early retirement date, without reduction for early commencement. The early retirement benefit is payable in monthly installments under the same normal or optional forms as the normal retirement benefit.

F. EARLY RETIREMENT BENEFIT (Reduced)

1. **Eligibility:** A terminating member who has completed at least 3 years of contributing service and who either (i) has attained age 55 and completed 10 years of credited service, or (ii) has completed 20 years of credited service, may elect to have his deferred vested benefit commence on the first of any month following his 55th birthday. A terminating member with 30 years of credited service, at least 3 of which are contributing service, may retire early at any age.
2. **Amount:** The early retirement benefit is equal to the normal retirement benefit based on final average salary and years of credited service as of early retirement date actuarially reduced for the number of years by which the early retirement benefit commencement date precedes the retiring member's 62nd birthday. A member retiring after 30 years of service (who is not eligible for an unreduced benefit) receives a benefit actuarially reduced for the number of years by which his early retirement precedes age 60. The early retirement benefit is payable in monthly installments under the same normal or optional forms as the normal retirement benefit.

G. DISABILITY BENEFIT

1. **Eligibility:** A member who has completed 10 years of credited service, including three years of contributing service, and who is found to be totally and permanently disabled, is eligible for a disability benefit. A member with less than 10 years of credited service (or less than 3 years of contributing service) who incurs a service-connected total and permanent disability and who is receiving workers' compensation on account of this disability is also eligible for a disability benefit.
2. **Amount:** The monthly disability benefit is 2% of the member's final average salary *times* his credited service when disabled. Prior to age 65 the disability benefit is not less than 50% of the member's final average salary. At age 65 the benefit is the greater of (i) 2% of the member's final average salary *times* his credited service at the time of disablement or (ii) 20% of the member's final average salary.

H. DEFERRED VESTED BENEFIT

1. **Eligibility:** A terminating member who has completed 5 years of credited service, including at least 3 years of contributing service, and who does not withdraw his accumulated contributions, is entitled to a deferred vested benefit commencing at age 62.
2. **Amount:** The deferred vested pension is equal to 2% of the member's final average salary *times* his years of credited service. The deferred vested pension benefit is payable in monthly installments under the same normal or optional forms as the normal retirement benefit.

I. PRERETIREMENT DEATH BENEFITS

1. **Eligibility:** A life annuity is paid to the surviving spouse or other designated beneficiary of an active member (or former member entitled to a deferred benefit) who dies after completing 10 years of credited service and before retiring. If a member has no spouse or designated beneficiary, his children (if any) receive annuities until they reach age 21 or marry, if earlier. If there is no spouse, child, or qualified beneficiary, or if the member dies with less than 10 years of credited service, then the member's accumulated contributions will be paid to his estate as a death benefit.
2. **Amount:** The spouse's or designated beneficiary's pension is calculated as if the member had retired on the day of his death and elected a 100% joint and survivor annuity with his spouse or designated beneficiary as co-annuitant. There is no reduction for early commencement of benefits.

The amount of a (non-designated beneficiary) surviving child's annuity is based upon the annuity reserve the member would have had if he had retired on his date of death. This annuity is payable until the child reaches age 21 or is married, if earlier. In no event is a surviving child paid more than \$250 monthly, and the total paid to all surviving children will not exceed 60% of the member's final average salary.

J. POSTRETIREMENT DEATH BENEFITS

Other than the death benefit inherent in the cash refund feature of the normal form of benefit, or the survivor's annuity in the case of a joint and survivor pension, no postretirement death benefits are payable under this retirement plan.

K. OTHER TERMINATIONS

A member who terminates employment other than by death and prior to becoming eligible for a normal retirement, early retirement, deferred vested or disability benefit, may upon his request receive a refund of his contributions. If the member has at least 2 years of service in the plan, the refund will include accrued interest on the member's contributions. After receiving a refund of contributions, a member has no further right to benefits under this retirement system.

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 date of hire.

C. Interest Rate and Expenses

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

D. Mortality

The 1971 Group Annuity Mortality Table, separately for males and females, is used for healthy lives. Healthy male mortality is based on a 1-year setback to the male table. Healthy female mortality is based on the female table without adjustment. Disabled male mortality is based on an 8-year age set forward to the healthy table. Disabled female mortality is based on the Revenue Ruling 96-7 Post 94 female disability mortality table.

E. Salary Scales

The salary scale is shown in the Appendix. Projected salary increases for State employees are in the range of 4.25% to 6.0% per year and for Nonstate employees in the range of 3.75% to 5.5% per year.

F. Withdrawal from Service

Withdrawal rates are shown in the Appendix. All withdrawal is assumed to result in refund of contributions if nonvested or a deferred annuity if vested. The liability for a refund of contributions for nonactive nonvested members as of the valuation date is assumed to be 60% of the total employee contribution balance of such members.

G. Disablement Rates

Disablement rates are shown in the Appendix.

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

It is assumed that active members will accrue one year of service for each future year of employment.

J. Noncontributory Service Loadings

Noncontributory service for active members is estimated from members' contributory service by adjusting the present value of benefits projected from contributory service alone. An 8.5% load is used for males and a 2.5% load is used for females.

K. Retirement Rates

The retirement rates are shown in the Appendix.

L. Asset Valuation Method

Assets for valuation purposes are included at Market Value.

L. Plan Contributions

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

State Salary Scale

Age	Male	Female	Age	Male	Female	Age	Male	Female
19	1.06000	1.06000	37	1.05150	1.05150	54	1.04550	1.04550
20	1.06000	1.06000	38	1.05100	1.05100	55	1.04500	1.04500
21	1.05950	1.05950	39	1.05050	1.05050	56	1.04450	1.04450
22	1.05900	1.05900	40	1.05000	1.05000	57	1.04400	1.04400
23	1.05850	1.05850	41	1.04975	1.04975	58	1.04350	1.04350
24	1.05800	1.05800	42	1.04950	1.04950	59	1.04300	1.04300
25	1.05750	1.05750	43	1.04925	1.04925	60	1.04250	1.04250
26	1.05700	1.05700	44	1.04900	1.04900	61	1.04250	1.04250
27	1.05650	1.05650	45	1.04875	1.04875	62	1.04250	1.04250
28	1.05600	1.05600	46	1.04850	1.04850	63	1.04250	1.04250
29	1.05550	1.05550	47	1.04825	1.04825	64	1.04250	1.04250
30	1.05500	1.05500	48	1.04800	1.04800	65	1.04250	1.04250
31	1.05450	1.05450	49	1.04775	1.04775	66	1.04250	1.04250
32	1.05400	1.05400	50	1.04750	1.04750	67	1.04250	1.04250
33	1.05350	1.05350	51	1.04700	1.04700	68	1.04250	1.04250
34	1.05300	1.05300	52	1.04650	1.04650	69	1.04250	1.04250
35	1.05250	1.05250	53	1.04600	1.04600	70	1.04250	1.04250
36	1.05200	1.05200						

Nonstate Salary Scale

Age	Male	Female	Age	Male	Female	Age	Male	Female
19	1.05500	1.05500	37	1.04650	1.04650	54	1.04050	1.04050
20	1.05500	1.05500	38	1.04600	1.04600	55	1.04000	1.04000
21	1.05450	1.05450	39	1.04550	1.04550	56	1.03950	1.03950
22	1.05400	1.05400	40	1.04500	1.04500	57	1.03900	1.03900
23	1.05350	1.05350	41	1.04475	1.04475	58	1.03850	1.03850
24	1.05300	1.05300	42	1.04450	1.04450	59	1.03800	1.03800
25	1.05250	1.05250	43	1.04425	1.04425	60	1.03750	1.03750
26	1.05200	1.05200	44	1.04400	1.04400	61	1.03750	1.03750
27	1.05150	1.05150	45	1.04375	1.04375	62	1.03750	1.03750
28	1.05100	1.05100	46	1.04350	1.04350	63	1.03750	1.03750
29	1.05050	1.05050	47	1.04325	1.04325	64	1.03750	1.03750
30	1.05000	1.05000	48	1.04300	1.04300	65	1.03750	1.03750
31	1.04950	1.04950	49	1.04275	1.04275	66	1.03750	1.03750
32	1.04900	1.04900	50	1.04250	1.04250	67	1.03750	1.03750
33	1.04850	1.04850	51	1.04200	1.04200	68	1.03750	1.03750
34	1.04800	1.04800	52	1.04150	1.04150	69	1.03750	1.03750
35	1.04750	1.04750	53	1.04100	1.04100	70	1.03750	1.03750
36	1.04700	1.04700						

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	0.20000	0.20000	33	0.15700	0.15800	47	0.12600	0.12600
20	0.20000	0.20000	34	0.15400	0.15400	48	0.12400	0.12400
21	0.19600	0.19600	35	0.15200	0.15000	49	0.12200	0.12200
22	0.19300	0.19200	36	0.14800	0.14800	50	0.12000	0.12000
23	0.19000	0.18800	37	0.14600	0.14600	51	0.11800	0.11800
24	0.18700	0.18400	38	0.14400	0.14400	52	0.11600	0.11600
25	0.18300	0.18000	39	0.14200	0.14200	53	0.11400	0.11400
26	0.18000	0.17800	40	0.14000	0.14000	54	0.11200	0.11200
27	0.17700	0.17600	41	0.13800	0.13800	55	0.11000	0.11000
28	0.17400	0.17400	42	0.13600	0.13600	56	0.11000	0.11000
29	0.17000	0.17200	43	0.13400	0.13400	57	0.11000	0.11000
30	0.16600	0.17000	44	0.13200	0.13200	58	0.11000	0.11000
31	0.16300	0.16600	45	0.13000	0.13000	59	0.11000	0.11000
32	0.16000	0.16200	46	0.12800	0.12800	60	0.11000	0.11000

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	0.21000	0.18000	33	0.15000	0.14800	47	0.10000	0.10600
20	0.21000	0.18000	34	0.14500	0.14400	48	0.11000	0.10400
21	0.20600	0.17800	35	0.14000	0.14000	49	0.11000	0.10200
22	0.20200	0.17600	36	0.13600	0.13600	50	0.11000	0.10000
23	0.19800	0.17400	37	0.13200	0.13200	51	0.10800	0.09800
24	0.19400	0.17200	38	0.12800	0.12800	52	0.10600	0.09600
25	0.19000	0.17000	39	0.12400	0.12400	53	0.10400	0.09400
26	0.18500	0.16800	40	0.12000	0.12000	54	0.10200	0.09200
27	0.18000	0.16600	41	0.11800	0.11800	55	0.10000	0.09000
28	0.17500	0.16400	42	0.11600	0.11600	56	0.10000	0.09000
29	0.17000	0.16200	43	0.11400	0.11400	57	0.10000	0.09000
30	0.16500	0.16000	44	0.11200	0.11200	58	0.10000	0.09000
31	0.16000	0.15600	45	0.11000	0.11000	59	0.10000	0.09000
32	0.15500	0.15200	46	0.11000	0.10800	60	0.10000	0.09000

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	0.19000	0.16000	33	0.12800	0.12800	47	0.08600	0.08600
20	0.19000	0.16000	34	0.12400	0.12400	48	0.08400	0.08400
21	0.18600	0.15800	35	0.12000	0.12000	49	0.08200	0.08200
22	0.18200	0.15600	36	0.11600	0.11600	50	0.08000	0.08000
23	0.17800	0.15400	37	0.11200	0.11200	51	0.07800	0.07800
24	0.17400	0.15200	38	0.10800	0.10800	52	0.07600	0.07600
25	0.17000	0.15000	39	0.10400	0.10400	53	0.07400	0.07400
26	0.16400	0.14800	40	0.10000	0.10000	54	0.07200	0.07200
27	0.15800	0.14600	41	0.09800	0.09800	55	0.07000	0.07000
28	0.15200	0.14400	42	0.09600	0.09600	56	0.06800	0.06800
29	0.14600	0.14200	43	0.09400	0.09400	57	0.06600	0.06600
30	0.14000	0.14000	44	0.09200	0.09200	58	0.06400	0.06400
31	0.13600	0.13600	45	0.09000	0.09000	59	0.06200	0.06200
32	0.13200	0.13200	46	0.08800	0.08800	60	0.06000	0.06000

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	0.16000	0.14000	33	0.10800	0.10800	47	0.06600	0.07300
20	0.16000	0.14000	34	0.10400	0.10400	48	0.06400	0.07200
21	0.15600	0.13800	35	0.10000	0.10000	49	0.06200	0.07100
22	0.15200	0.13600	36	0.09600	0.09600	50	0.06000	0.07000
23	0.14800	0.13400	37	0.09200	0.09200	51	0.05800	0.06800
24	0.14400	0.13200	38	0.08800	0.08800	52	0.05600	0.06600
25	0.14000	0.13000	39	0.08400	0.08400	53	0.05400	0.06400
26	0.13600	0.12800	40	0.08000	0.08000	54	0.05200	0.06200
27	0.13200	0.12600	41	0.07800	0.07900	55	0.05000	0.06000
28	0.12800	0.12400	42	0.07600	0.07800	56	0.04800	0.05800
29	0.12400	0.12200	43	0.07400	0.07700	57	0.04600	0.05600
30	0.12000	0.12000	44	0.07200	0.07600	58	0.04400	0.05400
31	0.11600	0.11600	45	0.07000	0.07500	59	0.04200	0.05200
32	0.11200	0.11200	46	0.06800	0.07400	60	0.04000	0.05000

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	0.13000	0.10000	33	0.08800	0.08400	47	0.04600	0.05900
20	0.13000	0.10000	34	0.08400	0.08200	48	0.04400	0.05850
21	0.12600	0.09900	35	0.08000	0.08000	49	0.04200	0.05800
22	0.12200	0.09800	36	0.07600	0.07800	50	0.04000	0.05750
23	0.11800	0.09700	37	0.07200	0.07600	51	0.03800	0.05650
24	0.11400	0.09600	38	0.06800	0.07400	52	0.03600	0.05550
25	0.11000	0.09500	39	0.06400	0.07200	53	0.03400	0.05450
26	0.10800	0.09400	40	0.06000	0.07000	54	0.03200	0.05350
27	0.10600	0.09300	41	0.05800	0.06800	55	0.03000	0.05250
28	0.10400	0.09200	42	0.05600	0.06600	56	0.02800	0.05000
29	0.10200	0.09100	43	0.05400	0.06400	57	0.02600	0.04750
30	0.10000	0.09000	44	0.05200	0.06200	58	0.02400	0.04500
31	0.09600	0.08800	45	0.05000	0.06000	59	0.02200	0.04250
32	0.09200	0.08600	46	0.04800	0.05950	60	0.02000	0.04000

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	0.10000	0.11000	33	0.06100	0.06500	47	0.02600	0.03800
20	0.10000	0.11000	34	0.05800	0.06000	48	0.02400	0.03700
21	0.09600	0.10800	35	0.05500	0.05500	49	0.02200	0.03600
22	0.09200	0.10600	36	0.05200	0.05300	50	0.02000	0.03500
23	0.08800	0.10400	37	0.04900	0.05100	51	0.01800	0.03200
24	0.08400	0.10200	38	0.04600	0.04900	52	0.01600	0.02900
25	0.08000	0.10000	39	0.04300	0.04700	53	0.01400	0.02600
26	0.07800	0.09600	40	0.04000	0.04500	54	0.01200	0.02300
27	0.07600	0.09200	41	0.03800	0.04400	55	0.01000	0.02000
28	0.07400	0.08800	42	0.03600	0.04300	56	0.01000	0.01800
29	0.07200	0.08400	43	0.03400	0.04200	57	0.01000	0.01600
30	0.07000	0.08000	44	0.03200	0.04100	58	0.01000	0.01400
31	0.06700	0.07500	45	0.03000	0.04000	59	0.01000	0.01200
32	0.06400	0.07000	46	0.02800	0.03900	60	0.01000	0.01000

Nonstate 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	0.26000	0.25000	33	0.20800	0.20900	47	0.15200	0.16800
20	0.26000	0.25000	34	0.20400	0.20500	48	0.14800	0.16200
21	0.25600	0.24700	35	0.20000	0.20000	49	0.14400	0.15600
22	0.25200	0.24400	36	0.19600	0.19800	50	0.14000	0.15000
23	0.24800	0.24100	37	0.19200	0.19600	51	0.13600	0.14600
24	0.24400	0.23800	38	0.18800	0.19400	52	0.13200	0.14200
25	0.24000	0.23400	39	0.18400	0.19200	53	0.12800	0.13800
26	0.23600	0.23100	40	0.18000	0.19000	54	0.12400	0.13400
27	0.23200	0.22800	41	0.17600	0.18800	55	0.12000	0.13000
28	0.22800	0.22500	42	0.17200	0.18600	56	0.11600	0.12800
29	0.22400	0.22200	43	0.16800	0.18400	57	0.11200	0.12600
30	0.22000	0.21800	44	0.16400	0.18200	58	0.11000	0.12400
31	0.21600	0.21500	45	0.16000	0.18000	59	0.11000	0.12200
32	0.21200	0.21200	46	0.15600	0.17400	60	0.11000	0.12000

Nonstate 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	0.21000	0.21000	33	0.15800	0.18400	47	0.11600	0.14200
20	0.21000	0.21000	34	0.15400	0.18200	48	0.11400	0.13800
21	0.20800	0.20800	35	0.15000	0.18000	49	0.11200	0.13400
22	0.20600	0.20600	36	0.14600	0.17700	50	0.11000	0.13000
23	0.20400	0.20400	37	0.14200	0.17400	51	0.10800	0.12800
24	0.20200	0.20200	38	0.13800	0.17100	52	0.10600	0.12600
25	0.20000	0.20000	39	0.13400	0.16800	53	0.10400	0.12400
26	0.19400	0.19800	40	0.13000	0.16500	54	0.10200	0.12200
27	0.18800	0.19600	41	0.12800	0.16200	55	0.10000	0.12000
28	0.18200	0.19400	42	0.12600	0.15900	56	0.10000	0.11800
29	0.17600	0.19200	43	0.12400	0.15600	57	0.10000	0.11600
30	0.17000	0.19000	44	0.12200	0.15300	58	0.10000	0.11400
31	0.16600	0.18800	45	0.12000	0.15000	59	0.10000	0.11200
32	0.16200	0.18600	46	0.11800	0.14600	60	0.10000	0.11000

Nonstate Withdrawal Decrements (2 to 3 years)

Age	Male	Female	Age	Male	Female	Age	Male	Female
19	0.20000	0.19000	33	0.14200	0.16400	47	0.09900	0.12400
20	0.20000	0.19000	34	0.13600	0.16200	48	0.09600	0.12100
21	0.19700	0.18800	35	0.13000	0.16000	49	0.09300	0.11800
22	0.19400	0.18600	36	0.12700	0.15600	50	0.09000	0.11500
23	0.19100	0.18400	37	0.12400	0.15200	51	0.08900	0.11300
24	0.18800	0.18200	38	0.12100	0.14800	52	0.08800	0.11100
25	0.18500	0.18000	39	0.11800	0.14400	53	0.08700	0.10900
26	0.18000	0.17800	40	0.11500	0.14000	54	0.08600	0.10700
27	0.17500	0.17600	41	0.11300	0.13800	55	0.08500	0.10500
28	0.17000	0.17400	42	0.11100	0.13600	56	0.08400	0.10300
29	0.16500	0.17200	43	0.10900	0.13400	57	0.08300	0.10100
30	0.16000	0.17000	44	0.10700	0.13200	58	0.08200	0.09900
31	0.15400	0.16800	45	0.10500	0.13000	59	0.08100	0.09700
32	0.14800	0.16600	46	0.10200	0.12700	60	0.08000	0.09500

Nonstate Withdrawal Decrements (3 to 4 years)

Age	Male	Female	Age	Male	Female	Age	Male	Female
19	0.19000	0.18000	33	0.12200	0.14300	47	0.08600	0.10600
20	0.19000	0.18000	34	0.11600	0.13900	48	0.08400	0.10400
21	0.18600	0.17800	35	0.11000	0.13500	49	0.08200	0.10200
22	0.18200	0.17600	36	0.10800	0.13400	50	0.08000	0.10000
23	0.17800	0.17400	37	0.10600	0.13300	51	0.07800	0.09800
24	0.17400	0.17200	38	0.10400	0.13200	52	0.07600	0.09600
25	0.17000	0.17000	39	0.10200	0.13100	53	0.07400	0.09400
26	0.16400	0.16700	40	0.10000	0.13000	54	0.07200	0.09200
27	0.15800	0.16400	41	0.09800	0.12600	55	0.07000	0.09000
28	0.15200	0.16100	42	0.09600	0.12200	56	0.06800	0.08800
29	0.14600	0.15800	43	0.09400	0.11800	57	0.06600	0.08600
30	0.14000	0.15500	44	0.09200	0.11400	58	0.06400	0.08400
31	0.13400	0.15100	45	0.09000	0.11000	59	0.06200	0.08200
32	0.12800	0.14700	46	0.08800	0.10800	60	0.06000	0.08000

Nonstate 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	0.17000	0.17000	33	0.10700	0.11200	47	0.06100	0.07600
20	0.17000	0.17000	34	0.10100	0.10600	48	0.05900	0.07400
21	0.16500	0.16600	35	0.09500	0.10000	49	0.05700	0.07200
22	0.16000	0.16200	36	0.09100	0.09800	50	0.05500	0.07000
23	0.15500	0.15800	37	0.08700	0.09600	51	0.05300	0.06800
24	0.15000	0.15400	38	0.08300	0.09400	52	0.05100	0.06600
25	0.14500	0.15000	39	0.07900	0.09200	53	0.04900	0.06400
26	0.14100	0.14600	40	0.07500	0.09000	54	0.04700	0.06200
27	0.13700	0.14200	41	0.07300	0.08800	55	0.04500	0.06000
28	0.13300	0.13800	42	0.07100	0.08600	56	0.04300	0.05800
29	0.12900	0.13400	43	0.06900	0.08400	57	0.04100	0.05600
30	0.12500	0.13000	44	0.06700	0.08200	58	0.03900	0.05400
31	0.11900	0.12400	45	0.06500	0.08000	59	0.03700	0.05200
32	0.11300	0.11800	46	0.06300	0.07800	60	0.03500	0.05000

Nonstate 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	0.15000	0.16000	33	0.08100	0.08800	47	0.04600	0.04400
20	0.15000	0.16000	34	0.07800	0.08400	48	0.04400	0.04100
21	0.14400	0.15400	35	0.07500	0.08000	49	0.04200	0.03800
22	0.13800	0.14800	36	0.07200	0.07700	50	0.04000	0.03500
23	0.13200	0.14200	37	0.06900	0.07400	51	0.03800	0.03300
24	0.12600	0.13600	38	0.06600	0.07100	52	0.03600	0.03100
25	0.12000	0.13000	39	0.06300	0.06800	53	0.03400	0.02900
26	0.11400	0.12400	40	0.06000	0.06500	54	0.03200	0.02700
27	0.10800	0.11800	41	0.05800	0.06200	55	0.03000	0.02500
28	0.10200	0.11200	42	0.05600	0.05900	56	0.02800	0.02400
29	0.09600	0.10600	43	0.05400	0.05600	57	0.02600	0.02300
30	0.09000	0.10000	44	0.05200	0.05300	58	0.02400	0.02200
31	0.08700	0.09600	45	0.05000	0.05000	59	0.02200	0.02100
32	0.08400	0.09200	46	0.04800	0.04700	60	0.02000	0.02000

State and Nonstate Disability Decrements

<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	0.00052	0.00092	47	0.00470	0.00240
20	0.00010	0.00010	34	0.00056	0.00096	48	0.00530	0.00260
21	0.00012	0.00018	35	0.00060	0.00100	49	0.00590	0.00280
22	0.00014	0.00026	36	0.00078	0.00110	50	0.00650	0.00300
23	0.00016	0.00034	37	0.00096	0.00120	51	0.00700	0.00380
24	0.00018	0.00042	38	0.00114	0.00130	52	0.00750	0.00460
25	0.00020	0.00050	39	0.00132	0.00140	53	0.00800	0.00540
26	0.00024	0.00056	40	0.00150	0.00150	54	0.00850	0.00620
27	0.00028	0.00062	41	0.00190	0.00160	55	0.00900	0.00700
28	0.00032	0.00068	42	0.00230	0.00170	56	0.00920	0.00750
29	0.00036	0.00074	43	0.00270	0.00180	57	0.00940	0.00800
30	0.00040	0.00080	44	0.00310	0.00190	58	0.00960	0.00850
31	0.00044	0.00084	45	0.00350	0.00200	59	0.00980	0.00900
32	0.00048	0.00088	46	0.00410	0.00220	60	0.01000	0.01000

State and Nonstate Retirement Decrements

<u>Age</u>	<u>Male</u>	<u>Female</u>
55	0.15000	0.15000
56	0.15000	0.15000
57	0.15000	0.15000
58	0.15000	0.15000
59	0.15000	0.15000
60	0.15000	0.15000
61	0.15000	0.15000
62	0.35000	0.35000
63	0.18000	0.18000
64	0.18000	0.18000
65	0.30000	0.30000
66	0.20000	0.20000
67	0.20000	0.20000
68	0.20000	0.20000
69	0.20000	0.20000
70	1.00000	1.00000

and older