



**West Virginia
Public Employees Retirement System**

**Actuarial Valuation
As of July 1, 2005**

Prepared by:

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an ACS company A C S

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

January 2006



January 13, 2006

West Virginia Consolidated Public Retirement Board
Capitol Complex, Building 5, Room 1000
1900 Kanawha Boulevard, East
Charleston, WV 25305

Re: West Virginia Public Employees' Retirement System, Actuarial Valuation as of July 1, 2005

Retirement Board Members:

We respectfully present our report on the actuarial valuation of the West Virginia Public Employees' Retirement System as of July 1, 2005. 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 valuation does not reflect the anticipated termination of the worker's compensation participants or the extra service the worker's compensation participants will be receiving upon leaving the plan on 12/31/2005.

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, 2005 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, 2005 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

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This report presents the results of the July 1, 2005 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, 2004, 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 the Plan's unfunded liability over a 30-year period from July 1, 2005 at a level dollar amount.

This valuation does not reflect the anticipated termination of the workers compensation participants or the extra service the worker's compensation participants will be receiving upon termination on 12/31/2005.

Comments on Valuation Results

Table 1 presents the development of the valuation results as of July 1, 2005 and, for comparison purposes, July 1, 2004. The calculated State cost is determined as the State's share of the normal cost (the cost to fund benefits accruing during the year), plus amortization of the existing unfunded actuarial liability over 30 years from July 1, 2005.

Table 2 presents a projection of the unfunded actuarial accrued liability to June 30, 2035. The unfunded actuarial accrued liability at the valuation date is approximately \$670 million. This table illustrates the expected pattern of change in the unfunded liability over a 30-year period.

Table 3 presents a cash flow projection of expected asset balances, contributions, disbursements and earnings over the period to FY2031.

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>7/1/05</u>	<u>7/1/04</u>
Actives	36,230	35,868
Retirees & Beneficiaries	19,397	18,928
Terminated Vested	3,112	3,022
Terminated Nonvested	<u>8,186</u>	<u>7,576</u>
Total recognized in the valuation	66,925	65,394

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, 2005. 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, 2005	July 1, 2004
Membership		
Active	36,230	35,868
Inactive	30,695	29,526
Total	<u>66,925</u>	<u>65,394</u>
1. Present Value of Future Benefits		
a. Active	\$ 3,226,993	\$ 3,138,150
b. Inactive - Retirees	1,304,695	1,191,430
- Disabled Retirees	146,349	137,670
- Beneficiaries	177,093	168,486
- Vested Terminated	69,405	68,699
- Non-Vested Terminated	6,039	5,473
c. Total	<u>4,930,574</u>	<u>4,709,908</u>
2. Actuarial Accrued Liability	4,074,385	3,870,201
3. Assets (Market Value)	3,404,651	3,095,660
4. Unfunded Actuarial Accrued Liability (2) - (3)	669,734	774,541
5. Annual Normal Cost Rate		
a. Present Value of Future Normal Cost (1c)-(2)	856,189	839,707
b. Present Value of Future Payroll	9,062,457	8,909,016
c. Normal Cost Rate as a % of Payroll (5a)/(5b)	9.45%	9.43%
d. Employee Contribution Rate	4.50%	4.50%
e. Employer Share of Normal Cost	4.95%	4.93%
f. Valuation Compensation FY 2006(2005)	1,162,098	1,134,111
6. Calculated Employer Cost FY 2006(2005)		
a. Amortization Payment on UAAL MOY ¹	54,694	60,927
b. Employer Normal Cost MOY	59,642	57,970
c. Total Employer Cost MOY	<u>114,336</u>	<u>118,897</u>
d. Employer Cost as Percentage of Compensation	9.84%	10.48%
7. Expected Employer Contributions FY 2006(2005)		
a. Employer Contribution Rate	10.50%	10.50%
b. Employer Contribution	122,020	119,082

¹ FY 2006, amortization payment is over 30 years from July 1, 2005

Table 2

Projection of Unfunded Accrued Liability and Annual Contributions

Fiscal Year Ending 6/30	Unfunded Liability at Beg. of Year	Projected Total Payroll	State Contributions	
			% of Payroll	Amount
2006	669,734,000	1,162,098,000	4.71%	54,694,000
2007	663,256,000	1,220,203,000	4.48%	54,694,000
2008	656,292,000	1,281,213,000	4.27%	54,694,000
2009	648,806,000	1,345,274,000	4.07%	54,694,000
2010	640,759,000	1,412,537,000	3.87%	54,694,000
2011	632,108,000	1,483,164,000	3.69%	54,694,000
2012	622,808,000	1,557,322,000	3.51%	54,694,000
2013	612,811,000	1,635,189,000	3.34%	54,694,000
2014	602,063,000	1,716,948,000	3.19%	54,694,000
2015	590,510,000	1,802,795,000	3.03%	54,694,000
2016	578,091,000	1,892,935,000	2.89%	54,694,000
2017	564,739,000	1,987,582,000	2.75%	54,694,000
2018	550,387,000	2,086,961,000	2.62%	54,694,000
2019	534,958,000	2,191,309,000	2.50%	54,694,000
2020	518,372,000	2,300,875,000	2.38%	54,694,000
2021	500,542,000	2,415,918,000	2.26%	54,694,000
2022	481,375,000	2,536,714,000	2.16%	54,694,000
2023	460,770,000	2,663,550,000	2.05%	54,694,000
2024	438,620,000	2,796,727,000	1.96%	54,694,000
2025	414,808,000	2,936,564,000	1.86%	54,694,000
2026	389,211,000	3,083,392,000	1.77%	54,694,000
2027	361,694,000	3,237,562,000	1.69%	54,694,000
2028	332,113,000	3,399,440,000	1.61%	54,694,000
2029	300,313,000	3,569,412,000	1.53%	54,694,000
2030	266,129,000	3,747,882,000	1.46%	54,694,000
2031	229,380,000	3,935,276,000	1.39%	54,694,000
2032	189,876,000	4,132,040,000	1.32%	54,694,000
2033	147,409,000	4,338,642,000	1.26%	54,694,000
2034	101,757,000	4,555,574,000	1.20%	54,694,000
2035	52,680,000	4,783,353,000	1.14%	54,694,000

Table
West Virginia Public Employees' Retirement System
Cash Flow Projection FY 2006 Through FY 2031

FY Ending 6/30	(1) Assets Beg. of Year	(2) Expected Contributions	(3) Benefits	(4) Earnings	(5) Net Income	(6) Assets End of Year
2006	3,404,651,000	174,315,000	211,600,000	253,951,000	216,666,000	3,621,317,000
2007	3,621,317,000	183,031,000	219,214,000	270,242,000	234,059,000	3,855,376,000
2008	3,855,376,000	192,183,000	233,702,000	287,596,000	246,077,000	4,101,453,000
2009	4,101,453,000	201,792,000	249,042,000	305,837,000	258,587,000	4,360,040,000
2010	4,360,040,000	211,882,000	265,929,000	324,976,000	270,929,000	4,630,969,000
2011	4,630,969,000	222,476,000	284,190,000	345,008,000	283,294,000	4,914,263,000
2012	4,914,263,000	233,600,000	303,676,000	365,942,000	295,866,000	5,210,129,000
2013	5,210,129,000	245,280,000	323,689,000	387,819,000	309,410,000	5,519,539,000
2014	5,519,539,000	257,544,000	343,951,000	410,725,000	324,318,000	5,843,857,000
2015	5,843,857,000	270,421,000	364,652,000	434,756,000	340,525,000	6,184,382,000
2016	6,184,382,000	283,942,000	385,079,000	460,036,000	358,899,000	6,543,281,000
2017	6,543,281,000	298,139,000	405,386,000	486,724,000	379,477,000	6,922,758,000
2018	6,922,758,000	313,046,000	425,188,000	515,002,000	402,860,000	7,325,618,000
2019	7,325,618,000	328,698,000	443,945,000	545,100,000	429,853,000	7,755,471,000
2020	7,755,471,000	345,133,000	461,643,000	577,291,000	460,781,000	8,216,252,000
2021	8,216,252,000	362,390,000	477,827,000	611,890,000	496,453,000	8,712,705,000
2022	8,712,705,000	380,510,000	492,733,000	649,245,000	537,022,000	9,249,727,000
2023	9,249,727,000	399,536,000	506,498,000	689,718,000	582,756,000	9,832,483,000
2024	9,832,483,000	419,513,000	518,883,000	733,710,000	634,340,000	10,466,823,000
2025	10,466,823,000	440,489,000	529,582,000	781,671,000	692,578,000	11,159,401,000
2026	11,159,401,000	462,513,000	538,983,000	834,087,000	757,617,000	11,917,018,000
2027	11,917,018,000	485,639,000	546,996,000	891,475,000	830,118,000	12,747,136,000
2028	12,747,136,000	509,921,000	553,202,000	954,412,000	911,131,000	13,658,267,000
2029	13,658,267,000	535,417,000	557,588,000	1,023,539,000	1,001,368,000	14,659,635,000
2030	14,659,635,000	562,188,000	560,252,000	1,099,545,000	1,101,481,000	15,761,116,000
2031	15,761,116,000	590,297,000	561,074,000	1,183,180,000	1,212,403,000	16,973,519,000

Assumed interest rate: 7.50%

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

Notes:

1. The fund balance as of July 1, 2005 is the market value of the fund.
2. The contribution for FY 2006 is determined as 1.5.0% of anticipated FY 2006 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.
3. 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, 2005

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, 2005 and June 30, 2004

Group	June 30, 2005	June 30, 2004
Retirees, disabled retirees and beneficiaries currently receiving benefits	19,397	18,928
Terminated employees entitled to benefits but not yet receiving benefits	3,112	3,022
Terminated employees entitled to a return of employee contributions	8,186	7,576
Active Plan members		
Vested	25,232	24,988
Non Vested	10,998	10,880
Total	66,925	65,394

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%

3. The information presented in the required supplementary schedules was determined as part of the actuarial valuation at July 1, 2005. Additional information follows.

Valuation date	7/1/05
Actuarial cost method	Entry age
Amortization method	Level dollar amount
Remaining amortization period	30 years
Asset valuation method	Market value
Actuarial assumptions:	
Investment rate of return	7.5%
Projected salary increases	
State	4.5% - 6.0%
Nonstate	4.0% - 5.5%
Inflation rate	3.0%

Table 5
Valuation Assets as of June 30, 2005
(000 omitted)

Assets	<u>June 30, 2005</u>	<u>June 30, 2004</u>
Cash with State Treasurer	\$ 195	\$ 4,695
Investments at Fair Value	3,400,387	3,086,754
Contributions Receivable	4,337	4,343
Participant Loans Receivable	<u>0</u>	<u>0</u>
Total Assets	3,404,919	3,095,792
Liabilities		
Accrued Expenses and other Payables	<u>268</u>	<u>132</u>
Net Assets for Pension Benefits	\$ 3,404,651	\$ 3,095,660

Table 6
Statement of Changes in Net Assets for Benefits
For Year ended June 30, 2005
(000 omitted)

Net Assets for Pension Benefits - Beginning of Year	\$	3,095,660
Additions		
Contributions		
Member		52,984
Employer		118,740
Subtotal		<u>171,724</u>
Investment Income		
Net Appreciation in Fair Value *		330,072
Interest		0
Subtotal		<u>330,072</u>
Other Income		0
Annuity Payable		0
Total		<u>501,796</u>
Deductions and Transfers		
Benefit Expense		183,292
Refunds of Contributions		7,903
Administrative Expenses		2,289
Transfers (to)/from plans		(679)
Total		<u>192,805</u>
Net Increase		308,991
Net Assets for Pension Benefits - End of Year	\$	3,404,651
Investment Return for Year:		
Valuation purposes (assumes mid-year transactions and offsets investment income by investment and administrative expense)		10.62%
Per Investment Management Board (time-weighted, excluding administrative expense)		10.72%
* Net of Investment Expense		

Table 7

Reconciliation of Plan Participants

	Active	Non-Vested Terms	Vested Terms	Retired	Beneficiaries	Total
Census as of July 1, 2004	35,868	7,576	3,022	15,280	3,648	65,394
New Entrants	3,406	542	3	39	0	3,990
Returned to Active Status	390	(222)	(164)	(4)	0	0
Retired	(970)	(17)	(135)	1,104	0	(18)
Died	(59)	(6)	(7)	(693)	(211)	(976)
Terminated						0
- Vested	(529)	(7)	536		0	0
- Non Vested	(663)	663	0	0	0	0
- Withdrew Contributions	(1,195)	(332)	(117)	0	0	(1,644)
- Transfer to Teachers		(1)				(1)
New Beneficiaries	0	0	0	0	241	241
QDRO's	0	0	0	0	0	0
Adjustments	(18)	(10)	(26)	(2)	(5)	(61)
Census as of July 1, 2005	36,230	8,186	3,112	15,724	3,673	66,925

Table 8
Summary of Membership and Payroll

	<u>7/1/2005</u> <u>Valuation</u>	<u>7/1/2004</u> <u>Valuation</u>
Active Members		
State Employees	24,101	23,856
Nonstate Employees	12,129	12,012
Total	<u>36,230</u>	<u>35,868</u>
Average Age	45.5	45.3
Average Service	11.5	11.5
Inactive Members		
Retirees	13,777	13,382
Beneficiaries	3,673	3,648
Disabled Retirees	1,947	1,898
Vested Terminated	3,112	3,022
Nonvested Terminated	8,186	7,576
Total	<u>30,695</u>	<u>29,526</u>
Payroll For Normal Cost		
State Employees	\$ 818,966,000	\$ 799,424,000
Nonstate Employees	343,132,000	334,687,000
Total	<u>\$ 1,162,098,000</u>	<u>\$ 1,134,111,000</u>
PV of Future Payroll	\$ 9,062,457,000	\$ 8,909,016,000
PV Member Contributions	\$ 407,811,000	\$ 400,906,000

TABLE 9a
NUMBER AND TOTAL ANNUAL COMPENSATION OF ACTIVE PARTICIPANTS

Attained Age	Years of Credited Service																				Total	
	Under 1	1 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./ Tot. Comp.	No./ Tot. Comp.	No./ Tot. Comp.	No./ Tot. Comp.	No./ Tot. Comp.	No./ Tot. Comp.	No./ Tot. Comp.	No./ Tot. Comp.	No./ Tot. Comp.	No./ Tot. Comp.	No./ Tot. Comp.	No./ Tot. Comp.	No./ Tot. Comp.	No./ Tot. Comp.	No./ Tot. Comp.	No./ Tot. Comp.	No./ Tot. Comp.	No./ Tot. Comp.	No./ Tot. Comp.	No./ Tot. Comp.		No./ Tot. Comp.
Under 25	145 3,025,690	435 10,265,986	20 510,577	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	600 13,802,253
25 to 29	166 3,660,241	1,198 31,917,707	438 12,811,141	11 293,636	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	1,813 48,682,725
30 to 34	128 2,916,323	967 25,662,883	1,023 33,298,951	337 12,403,894	18 669,515	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	2,473 74,951,566
35 to 39	78 1,629,786	876 23,753,402	816 26,404,879	647 24,327,604	236 9,111,955	17 598,752	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	2,670 85,826,378
40 to 44	90 2,002,287	819 22,639,659	739 23,604,521	540 19,234,591	502 19,725,844	258 10,153,171	97 3,686,586	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	3,045 101,046,659
45 to 49	134 2,933,504	757 21,365,381	740 23,045,061	602 21,422,165	588 22,837,863	423 17,254,019	611 23,941,278	101 4,040,471	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	3,956 136,839,742
50 to 54	62 1,255,539	612 17,721,789	711 22,948,955	591 21,081,428	596 22,600,093	458 18,236,109	732 30,827,898	610 25,755,942	64 2,709,763	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	4,436 163,137,516
55 to 59	43 941,917	398 11,468,353	498 16,536,307	492 17,194,207	513 18,776,475	414 16,006,598	390 16,399,002	423 19,925,719	252 12,251,681	19 932,876	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	3,442 130,433,135
60 to 64	7 193,443	110 3,177,174	188 6,276,550	216 7,774,483	205 7,702,549	160 6,528,685	131 5,041,914	69 3,056,613	106 5,448,219	40 2,005,143	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	1,232 47,204,773
65 to 69	1 21,206	14 385,230	43 1,413,602	59 2,015,769	59 2,306,884	44 1,820,905	32 1,304,135	26 1,150,397	22 1,091,153	21 997,803	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	321 12,507,084
70 & up	- -	- -	3 81,683	12 531,946	21 777,809	24 932,813	19 725,280	16 631,545	6 233,492	12 619,194	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	113 4,533,762
Total	854 18,579,936	6,186 168,357,564	5,219 166,932,227	3,507 126,279,723	2,738 104,508,987	1,798 71,531,052	2,012 81,926,093	1,245 54,560,687	450 21,734,308	92 4,555,016	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	24,101 818,965,593

TABLE 9b
NUMBER AND TOTAL ANNUAL COMPENSATION OF ACTIVE PARTICIPANTS

Attained Age	Years of Credited Service														Total
	Under 1	1 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	Total				
	No./ Tot. Comp.	No./ Tot. Comp.	No./ Tot. Comp.	No./ Tot. Comp.	No./ Tot. Comp.	No./ Tot. Comp.	No./ Tot. Comp.	No./ Tot. Comp.	No./ Tot. Comp.	No./ Tot. Comp.	No./ Tot. Comp.	No./ Tot. Comp.			
Under 25	84 1,388,033	329 6,798,743	18 501,446	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	431 8,688,222
25 to 29	71 1,284,489	561 13,396,993	240 6,401,408	17 468,597	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	889 21,551,487
30 to 34	52 892,085	555 13,635,343	416 11,962,173	171 5,209,572	18 578,921	- -	- -	- -	- -	- -	- -	- -	- -	- -	1,212 32,278,094
35 to 39	54 1,031,502	499 11,988,457	440 12,380,970	274 8,640,619	140 4,555,990	7 185,443	- -	- -	- -	- -	- -	- -	- -	- -	1,414 38,782,981
40 to 44	61 1,102,519	506 11,694,635	428 12,305,397	279 8,612,393	258 8,490,025	167 5,964,401	34 1,206,113	- -	- -	- -	- -	- -	- -	- -	1,733 49,375,483
45 to 49	92 1,605,728	470 11,379,668	430 11,570,073	331 10,309,787	293 9,886,909	210 7,623,824	198 6,712,428	22 817,227	- -	- -	- -	- -	- -	- -	2,046 59,905,644
50 to 54	45 876,342	378 9,624,324	360 9,712,356	306 9,289,311	271 8,476,713	209 7,412,366	220 8,448,824	129 4,890,413	15 580,042	- -	- -	- -	- -	- -	1,933 59,310,691
55 to 59	22 392,036	270 6,722,491	283 7,682,260	233 6,435,795	284 8,755,116	169 5,863,068	147 5,021,310	84 3,219,090	33 1,427,311	3 110,055	5 661	5 184	5 184	5 184	45,628,532
60 to 64	9 127,112	107 2,954,484	118 3,091,137	102 2,726,550	123 3,650,360	84 2,730,548	70 2,524,810	25 952,432	18 785,374	5 207,087	5 19,749,894	5 184	5 184	5 184	19,749,894
65 to 69	- -	23 464,586	27 691,495	44 1,093,546	39 981,137	15 469,827	17 580,028	9 401,264	5 234,303	5 216,629	5 184	5 184	5 184	5 184	5,132,815
70 & up	- -	- -	8 147,627	18 426,092	25 668,735	16 424,573	15 421,147	7 227,757	2 82,305	7 330,303	7 2,728,539	7 2,728,539	7 2,728,539	7 2,728,539	98 2,728,539
Total	490 8,699,846	3,698 88,659,724	2,768 76,446,342	1,775 53,212,262	1,451 46,043,906	877 30,674,050	701 24,914,660	276 10,508,183	73 3,109,335	20 864,074	20 12,129	20 12,129	20 12,129	20 12,129	343,132,382

TABLE 10
 DISTRIBUTION OF THE NUMBER AND AVERAGE MONTHLY BENEFITS
 OF RETIRED PARTICIPANTS AS OF JULY 1, 2005

Current Age	Service retirees			Beneficiaries			Disabled retirees			Total		
	Number	Avg. Age	Average Monthly Benefit	Number	Avg. Age	Average Monthly Benefit	Number	Avg. Age	Average Monthly Benefit	Number	Avg. Age	Average Monthly Benefit
Under 30	-	-	-	15	24	483	-	-	-	15	24	483
30-34	-	-	-	5	31	566	2	33	725	7	32	611
35-39	-	-	-	6	38	493	10	37	911	16	38	754
40-44	-	-	-	37	43	774	50	43	899	87	43	846
45-49	1	49	1,259	89	47	694	134	48	960	224	47	856
50-54	5	53	918	147	52	803	281	52	1,004	433	52	935
55-59	1,030	57	1,706	226	57	722	462	57	955	1,718	57	1,374
60-64	2,183	62	1,287	329	62	643	381	62	854	2,893	62	1,157
65-69	2,825	67	987	435	67	563	265	67	459	3,525	67	895
70-74	2,585	72	775	534	72	508	163	72	438	3,282	72	715
75-79	2,323	77	685	664	77	467	91	77	423	3,078	77	630
80-84	1,651	82	572	576	82	415	74	82	363	2,301	82	526
85-89	804	87	485	404	87	348	27	87	353	1,235	87	437
90-94	296	92	374	170	91	324	6	91	319	472	92	355
95 and over	74	97	407	36	97	395	1	97	550	111	97	404
Total	13,777	72	902	3,673	73	509	1,947	61	772	19,397	71	815
Total annual benefits			149,124,810			22,453,158			18,039,854			189,617,822

TABLE 11

**DISTRIBUTION OF THE NUMBER AND AVERAGE
MONTHLY BENEFITS OF PARTICIPANTS ENTITLED
TO DEFERRED BENEFITS AS OF JULY 1, 2005**

Deferred Vested			
Current Age	Number	Avg. Age	Average Monthly Benefit
Under 30	30	28	143
30-34	146	32	173
35-39	290	37	266
40-44	403	42	349
45-49	517	47	435
50-54	736	52	487
55-59	673	57	431
60-64	264	61	380
65-69	42	67	316
70-74	7	72	251
75-79	2	79	78
80-84	2	84	8
85-89	-	-	-
90-94	-	-	-
95 and over	-	-	-
Total	3,112	50	397

Total annual benefits

14,830,254

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 optionally choose to 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 reduced by $\frac{1}{2}\%$ per month (6% per year) that 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. In this case, a different scale of early retirement reduction factors applies to the formula benefit. 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, 2005

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. 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 4.5% to 6.0% per year and for Nonstate employees in the range of 4.0% 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 member's contributory service by adjusting the present values of benefits projected from contributory service alone. An 8.1% load is used for males and a 2.6% 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	1.04800	1.04800
20	1.06000	1.06000	38	1.05100	1.05100	55	1.04750	1.04750
21	1.05950	1.05950	39	1.05050	1.05050	56	1.04700	1.04700
22	1.05900	1.05900	40	1.05000	1.05000	57	1.04650	1.04650
23	1.05850	1.05850	41	1.05000	1.05000	58	1.04600	1.04600
24	1.05800	1.05800	42	1.05000	1.05000	59	1.04550	1.04550
25	1.05750	1.05750	43	1.05000	1.05000	60	1.04500	1.04500
26	1.05700	1.05700	44	1.05000	1.05000	61	1.04500	1.04500
27	1.05650	1.05650	45	1.05000	1.05000	62	1.04500	1.04500
28	1.05600	1.05600	46	1.05000	1.05000	63	1.04500	1.04500
29	1.05550	1.05550	47	1.05000	1.05000	64	1.04500	1.04500
30	1.05500	1.05500	48	1.05000	1.05000	65	1.04500	1.04500
31	1.05450	1.05450	49	1.05000	1.05000	66	1.04500	1.04500
32	1.05400	1.05400	50	1.05000	1.05000	67	1.04500	1.04500
33	1.05350	1.05350	51	1.04950	1.04950	68	1.04500	1.04500
34	1.05300	1.05300	52	1.04900	1.04900	69	1.04500	1.04500
35	1.05250	1.05250	53	1.04850	1.04850	70	1.04500	1.04500
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	1.04300	1.04300
20	1.05500	1.05500	38	1.04600	1.04600	55	1.04250	1.04250
21	1.05450	1.05450	39	1.04550	1.04550	56	1.04200	1.04200
22	1.05400	1.05400	40	1.04500	1.04500	57	1.04150	1.04150
23	1.05350	1.05350	41	1.04500	1.04500	58	1.04100	1.04100
24	1.05300	1.05300	42	1.04500	1.04500	59	1.04050	1.04050
25	1.05250	1.05250	43	1.04500	1.04500	60	1.04000	1.04000
26	1.05200	1.05200	44	1.04500	1.04500	61	1.04000	1.04000
27	1.05150	1.05150	45	1.04500	1.04500	62	1.04000	1.04000
28	1.05100	1.05100	46	1.04500	1.04500	63	1.04000	1.04000
29	1.05050	1.05050	47	1.04500	1.04500	64	1.04000	1.04000
30	1.05000	1.05000	48	1.04500	1.04500	65	1.04000	1.04000
31	1.04950	1.04950	49	1.04500	1.04500	66	1.04000	1.04000
32	1.04900	1.04900	50	1.04500	1.04500	67	1.04000	1.04000
33	1.04850	1.04850	51	1.04450	1.04450	68	1.04000	1.04000
34	1.04800	1.04800	52	1.04400	1.04400	69	1.04000	1.04000
35	1.04750	1.04750	53	1.04350	1.04350	70	1.04000	1.04000
36	1.04700	1.04700						

State Withdrawal Decrements (less than 1 year)

Age	Male	Female	Age	Male	Female	Age	Male	Female
19	0.22000	0.19000	33	0.16200	0.15800	47	0.12000	0.11600
20	0.22000	0.19000	34	0.15600	0.15400	48	0.12000	0.11400
21	0.21600	0.18800	35	0.15000	0.15000	49	0.12000	0.11200
22	0.21200	0.18600	36	0.14600	0.14600	50	0.12000	0.11000
23	0.20800	0.18400	37	0.14200	0.14200	51	0.11800	0.10800
24	0.20400	0.18200	38	0.13800	0.13800	52	0.11600	0.10600
25	0.20000	0.18000	39	0.13400	0.13400	53	0.11400	0.10400
26	0.19600	0.17800	40	0.13000	0.13000	54	0.11200	0.10200
27	0.19200	0.17600	41	0.12800	0.12800	55	0.11000	0.10000
28	0.18800	0.17400	42	0.12600	0.12600	56	0.11000	0.10000
29	0.18400	0.17200	43	0.12400	0.12400	57	0.11000	0.10000
30	0.18000	0.17000	44	0.12200	0.12200	58	0.11000	0.10000
31	0.17400	0.16600	45	0.12000	0.12000	59	0.11000	0.10000
32	0.16800	0.16200	46	0.12000	0.11800	60	0.11000	0.10000

State Withdrawal Decrements (1 to 2 years)

Age	Male	Female	Age	Male	Female	Age	Male	Female
19	0.21000	0.18000	33	0.15000	0.14800	47	0.11000	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 Decrement (2 to 3 years)

Age	Male	Female	Age	Male	Female	Age	Male	Female
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 Decrement (3 to 4 years)

Age	Male	Female	Age	Male	Female	Age	Male	Female
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 Decrement (4 to 5 years)

Age	Male	Female	Age	Male	Female	Age	Male	Female
19	0.13000	0.12000	33	0.08800	0.08200	47	0.04600	0.05300
20	0.13000	0.12000	34	0.08400	0.07600	48	0.04400	0.05200
21	0.12600	0.11800	35	0.08000	0.07000	49	0.04200	0.05100
22	0.12200	0.11600	36	0.07600	0.06800	50	0.04000	0.05000
23	0.11800	0.11400	37	0.07200	0.06600	51	0.03800	0.04800
24	0.11400	0.11200	38	0.06800	0.06400	52	0.03600	0.04600
25	0.11000	0.11000	39	0.06400	0.06200	53	0.03400	0.04400
26	0.10800	0.10800	40	0.06000	0.06000	54	0.03200	0.04200
27	0.10600	0.10600	41	0.05800	0.05900	55	0.03000	0.04000
28	0.10400	0.10400	42	0.05600	0.05800	56	0.02800	0.03800
29	0.10200	0.10200	43	0.05400	0.05700	57	0.02600	0.03600
30	0.10000	0.10000	44	0.05200	0.05600	58	0.02400	0.03400
31	0.09600	0.09400	45	0.05000	0.05500	59	0.02200	0.03200
32	0.09200	0.08800	46	0.04800	0.05400	60	0.02000	0.03000

State Withdrawal Decrement (greater than 5 years)

Age	Male	Female	Age	Male	Female	Age	Male	Female
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)

Age	Male	Female	Age	Male	Female	Age	Male	Female
19	0.22000	0.22000	33	0.16800	0.19400	47	0.12600	0.16200
20	0.22000	0.22000	34	0.16400	0.19200	48	0.12400	0.15800
21	0.21800	0.21800	35	0.16000	0.19000	49	0.12200	0.15400
22	0.21600	0.21600	36	0.15600	0.18800	50	0.12000	0.15000
23	0.21400	0.21400	37	0.15200	0.18600	51	0.11800	0.14600
24	0.21200	0.21200	38	0.14800	0.18400	52	0.11600	0.14200
25	0.21000	0.21000	39	0.14400	0.18200	53	0.11400	0.13800
26	0.20400	0.20800	40	0.14000	0.18000	54	0.11200	0.13400
27	0.19800	0.20600	41	0.13800	0.17800	55	0.11000	0.13000
28	0.19200	0.20400	42	0.13600	0.17600	56	0.11000	0.12800
29	0.18600	0.20200	43	0.13400	0.17400	57	0.11000	0.12600
30	0.18000	0.20000	44	0.13200	0.17200	58	0.11000	0.12400
31	0.17600	0.19800	45	0.13000	0.17000	59	0.11000	0.12200
32	0.17200	0.19600	46	0.12800	0.16600	60	0.11000	0.12000

Nonstate Withdrawal Decrements (1 to 2 years)

Age	Male	Female	Age	Male	Female	Age	Male	Female
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	0.13200	50	0.08000	0.10000
23	0.17800	0.17400	37	0.10600	0.12900	51	0.07800	0.09800
24	0.17400	0.17200	38	0.10400	0.12600	52	0.07600	0.09600
25	0.17000	0.17000	39	0.10200	0.12300	53	0.07400	0.09400
26	0.16400	0.16700	40	0.10000	0.12000	54	0.07200	0.09200
27	0.15800	0.16400	41	0.09800	0.11800	55	0.07000	0.09000
28	0.15200	0.16100	42	0.09600	0.11600	56	0.06800	0.08800
29	0.14600	0.15800	43	0.09400	0.11400	57	0.06600	0.08600
30	0.14000	0.15500	44	0.09200	0.11200	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)

Age	Male	Female	Age	Male	Female	Age	Male	Female
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)

Age	Male	Female	Age	Male	Female	Age	Male	Female
19	0.15000	0.16000	33	0.08500	0.08200	47	0.03600	0.04400
20	0.15000	0.16000	34	0.08000	0.07600	48	0.03400	0.04100
21	0.14400	0.15600	35	0.07500	0.07000	49	0.03200	0.03800
22	0.13800	0.15200	36	0.07000	0.06800	50	0.03000	0.03500
23	0.13200	0.14800	37	0.06500	0.06600	51	0.02800	0.03300
24	0.12600	0.14400	38	0.06000	0.06400	52	0.02600	0.03100
25	0.12000	0.14000	39	0.05500	0.06200	53	0.02400	0.02900
26	0.11600	0.13200	40	0.05000	0.06000	54	0.02200	0.02700
27	0.11200	0.12400	41	0.04800	0.05800	55	0.02000	0.02500
28	0.10800	0.11600	42	0.04600	0.05600	56	0.01800	0.02400
29	0.10400	0.10800	43	0.04400	0.05400	57	0.01600	0.02300
30	0.10000	0.10000	44	0.04200	0.05200	58	0.01400	0.02200
31	0.09500	0.09400	45	0.04000	0.05000	59	0.01200	0.02100
32	0.09000	0.08800	46	0.03800	0.04700	60	0.01000	0.02000

State and Nonstate Disability Decrements

Age	Male	Female	Age	Male	Female	Age	Male	Female
19	0.00000	0.00000	33	0.00052	0.00092	47	0.00540	0.00280
20	0.00010	0.00010	34	0.00056	0.00096	48	0.00610	0.00320
21	0.00012	0.00018	35	0.00060	0.00100	49	0.00680	0.00360
22	0.00014	0.00026	36	0.00078	0.00110	50	0.00750	0.00400
23	0.00016	0.00034	37	0.00096	0.00120	51	0.00770	0.00450
24	0.00018	0.00042	38	0.00114	0.00130	52	0.00800	0.00500
25	0.00020	0.00050	39	0.00132	0.00140	53	0.00850	0.00550
26	0.00024	0.00056	40	0.00150	0.00150	54	0.00880	0.00600
27	0.00028	0.00062	41	0.00200	0.00160	55	0.00900	0.00700
28	0.00032	0.00068	42	0.00250	0.00170	56	0.00920	0.00750
29	0.00036	0.00074	43	0.00300	0.00180	57	0.00940	0.00800
30	0.00040	0.00080	44	0.00350	0.00190	58	0.00960	0.00850
31	0.00044	0.00084	45	0.00400	0.00200	59	0.00980	0.00900
32	0.00048	0.00088	46	0.00470	0.00240	60	0.01000	0.01000

State and Nonstate Retirement Decrements

Age	Male	Female
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	0.40000	0.40000
63	0.18000	0.18000
64	0.18000	0.18000
65	0.40000	0.40000
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