

**JUNE 30, 2007**  
**POST RETIREMENT BENEFITS ANALYSIS**  
**OF**  
**THE VERMONT STATE EMPLOYEES'**  
**RETIREMENT SYSTEM**

**October 2007**

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## SECTION I - OVERVIEW

The Board of Trustees of the Vermont State Employees' Retirement System has engaged Buck to prepare an actuarial valuation of their post-retirement benefits program as of June 30, 2007. The State Treasurer's Office provided the employee data and premium information used in the completion of this study.

The purposes of the valuation are to measure the current liabilities of the System for its post-retirement benefits program, to determine the level of contributions necessary to assure sound funding of such benefits and to provide reporting and disclosure information for financial statements, governmental agencies and other interested parties. This valuation report contains information that is required for compliance with the Government Accounting Standards Board's Statements 43 and 45, which relate to accounting and financial reporting for post-employment benefits other than pensions.

We performed the calculations presented in this study on two bases. Under one, it is assumed that the System's post-retirement medical benefits other than pensions are funded in a manner similar to that used for pensions. Under the second, it is assumed that there is no pre-funding of such benefits. Section II provides a summary of the principal valuation results. Section V provides a projection of expense and funding amounts.

Respectfully Submitted,  
BUCK CONSULTANTS, LLC

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November 13, 2007

Date

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Date

## SECTION I - OVERVIEW

The plan experienced a net increase in its accrued liability over the past year, primarily due to an increase of 5% in premiums for most covered participants (an 8% increase had been assumed in the prior valuation) and a net increase in its participant population from 11,420 to 11,701.

The economic actuarial assumptions used in this valuation were changed from those used last year. The discount rate used in the pre-funding scenario was changed from 8.00% to 8.25%. Demographic assumptions were changed to be consistent with those used in the pension actuarial valuation. The effect of the changes is a reduction in the accrued liability of about \$1.8 million, and an increase in the normal cost of about \$0.5 million. The results do not reflect any announced cost rates for 2008.

The costs developed in this report are reasonably close to those expected, based on last year's figures and anticipated trends. The plan experienced an actuarial gain of about \$5.2 million, primarily due to lower increases in benefit costs than had been assumed. The assumed increase for the year was 8%. The actual rates of increase were as follows:

Total Choice	2.94%
Health Guard PPO	3.20%
Selectcare POS	5.82%
SafetyNet	5.00%

GASB Staff Technical Bulletin No. 2006-1, Accounting and Financial Reporting by Employers for Payments from the Federal Government Pursuant to the Retiree Drug Subsidy Provisions of Medicare Part D, was issued on June 30, 2006. The Technical Bulletin provides that GASB OPEB calculations cannot reflect offsets for future Medicare Part D subsidy payments. Instead, the payments are to be reflected when the drug subsidy is actually earned (i.e., when the drug benefit costs for which the subsidy is due have been incurred by the participants.)

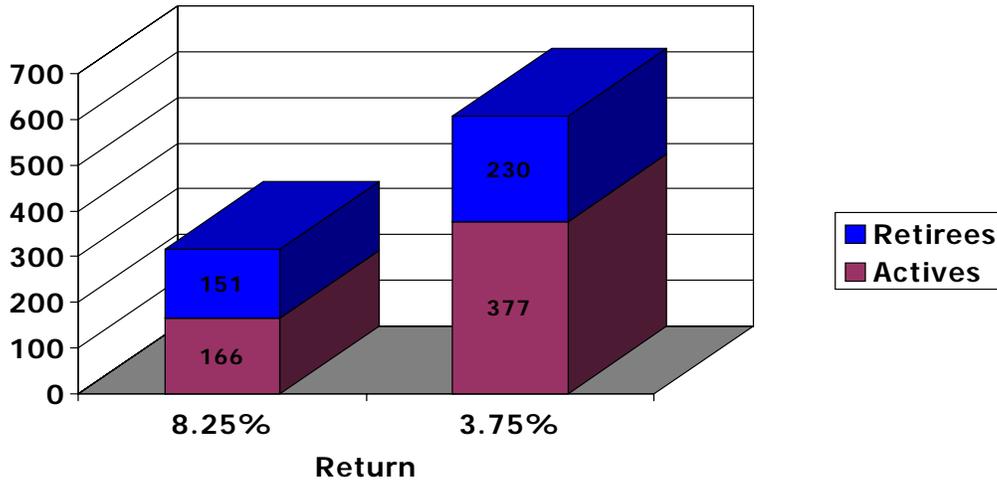
## SECTION II – REQUIRED INFORMATION

	<u>Pre-Funding Basis</u>	<u>Pay-as-you-go Basis</u>
a) Assumed discount rate	8.25%	3.75%
b) Actuarial value of assets	\$ 2,210,874	\$ 2,210,874
c) Actuarial accrued liability		
Active Participants	\$ 165,647,834	\$ 376,919,766
Retired Participants	<u>151,129,166</u>	<u>229,579,164</u>
Total	\$ 316,777,000	\$ 606,498,930
d) Unfunded actuarial liability (c. - b.)	\$ 314,566,126	\$ 604,288,056
e) Funded ratio	0.7%	0.4%
f) Annual covered payroll	\$ 386,916,939	\$ 386,916,939
g) Unfunded actuarial liability as a percentage of covered payroll	81.3%	156.2%
h) Normal cost for the 2008 fiscal year	\$ 11,336,486	\$ 30,443,640
i) Amortization of unfunded actuarial liability for the 2008 fiscal year (30-year)	\$ <u>15,759,345</u>	\$ <u>16,841,263</u>
j) Annual Required Contribution (ARC) for the 2008 fiscal year* (h. + i.)	\$ 27,095,831	\$ 47,284,903
k) Expected benefit payments	\$ 16,390,080	\$ 16,390,080
l) Increase in annual cost to fund the Plan (j. - k.)	\$ 10,705,751	N/A

\* Payment is assumed to be made at the beginning of the fiscal year.

**SECTION II – REQUIRED INFORMATION**

**Actuarial Accrued Liability in \$ millions**

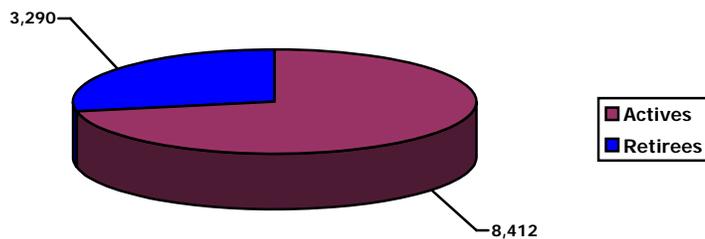


**SECTION III - MEMBERSHIP DATA AND MEDICAL PREMIUM**

**Number of participants included in valuation**

	<u>Total</u>
Active	
Group A	28
Group C	385
Group D	51
Group F	<u>7,947</u>
Total	8,411
Retired	<u>3,290</u>
Total	11,701

**Participants**



### SECTION III - MEMBERSHIP DATA AND MEDICAL PREMIUM

#### Monthly State Costs (including expenses) Effective January 1, 2007

	<u>State Share</u>	<u>Retirees</u>	<u>Beneficiaries</u>
<b>Total Choice</b>			
Retiree under 65	\$449.42	182	0
2 Person under 65	\$898.83	129	129
Family Retiree under 65	\$1,235.90	22	22
Retiree under 65 and 1 over 65	\$636.12	76	76
3 Person, Retiree and 1 under 65 and 1 over 65	\$836.66	1	1
Retiree over 65	\$186.70	1350	0
2 Person over 65	\$373.41	729	729
Retiree over 65 and 1 under 65	\$636.12	187	187
Retiree over 65 and 2 or more under 65	\$836.66	8	8
Retiree over 65 and 2 or more dependents, 1 Medicare eligible	\$548.14	5	5
<b>Health Guard PPO</b>			
Retiree under 65	\$403.10	1	0
2 Person under 65	\$806.21	0	0
Family Retiree under 65	\$1,108.54	0	0
Retiree under 65 and 1 over 65	\$579.51	2	2
3 Person, Retiree and 1 under 65 and 1 over 65	\$757.53	0	0
Retiree over 65	\$176.41	5	0
2 Person over 65	\$352.82	10	10
Retiree over 65 and 1 under 65	\$579.51	4	4
Retiree over 65 and 2 or more under 65	\$757.53	0	0
Retiree over 65 and 2 or more dependents, 1 Medicare eligible	\$516.21	0	0
<b>SelectCare POS</b>			
Retiree under 65	\$376.13	242	0
2 Person under 65	\$752.26	255	255
Family (Retiree under 65)	\$1,034.35	51	51
<b>SafetyNet</b>			
Retiree under 65	\$263.52	5	0
2 Person under 65	\$527.04	0	0
Family (Retiree under 65)	\$724.68	0	0
Other		26	0
<b>Total</b>		<b>3,290</b>	<b>1,479</b>

THE NUMBER OF ACTIVE MEMBERS  
DISTRIBUTED BY AGE AND SERVICE  
AS OF JUNE 30, 2007

AGE	<i>Years of Service</i>									<i>Total</i>
	<i>0 to 4</i>	<i>5 to 9</i>	<i>10 to 14</i>	<i>15 to 19</i>	<i>20 to 24</i>	<i>25 to 29</i>	<i>30 to 34</i>	<i>35 to 39</i>	<i>40 &amp; up</i>	
Under 20	4	0	0	0	0	0	0	0	0	4
20 to 24	195	2	0	0	0	0	0	0	0	197
25 to 29	440	73	0	0	0	0	0	0	0	513
30 to 34	432	265	52	5	0	0	0	0	0	754
35 to 39	401	315	182	129	5	0	0	0	0	1,032
40 to 44	364	287	166	197	147	13	0	0	0	1,174
45 to 49	318	272	138	198	171	162	23	0	0	1,282
50 to 54	276	271	157	198	181	237	101	9	0	1,430
55 to 59	183	198	125	140	168	216	178	68	1	1,277
60 to 64	76	84	60	83	93	81	65	60	15	617
65 to 69	10	22	14	7	6	11	10	9	6	95
70 & up	3	5	5	7	2	2	2	4	6	36
TOTAL	2,702	1,794	899	964	773	722	379	150	28	8,411

## SECTION IV – REQUIRED SUPPLEMENTARY INFORMATION

The Schedule of Funding Progress will be required to be included in the State's Financial Statements beginning with the Fiscal Year ending in 2008.

### SCHEDULE OF FUNDING PROGRESS WITH ASSUMPTIONS BASED ON A POLICY OF PRE-FUNDING

(dollar amounts in thousands)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b)-(a)	Funded Ratio (a)/(b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b)-(a)]/(c)
June 30, 2007	\$2,211	\$316,777	\$314,566	0.7%	\$386,917	81.3%
June 30, 2006	\$0	\$303,492	\$303,492	0.0%	\$369,310	82.2%
June 30, 2005	\$0	\$289,173	\$289,173	0.0%	\$349,258	82.8%

These results are based on a discount rate of 8.25%.

### SCHEDULE OF FUNDING PROGRESS WITH ASSUMPTIONS BASED ON POLICY OF PAY-AS-YOU-GO FUNDING

(dollar amounts in thousands)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b)-(a)	Funded Ratio (a)/(b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b)-(a)]/(c)
June 30, 2007	\$2,211	\$606,499	\$604,288	0.4%	\$386,917	156.2%
June 30, 2006	\$0	\$552,152	\$552,152	0.0%	\$369,310	149.5%
June 30, 2005	\$0	\$529,027	\$529,027	0.0%	\$349,258	151.5%

These results are based on a discount rate of 3.75%.

## SECTION V – FORECASTS

The Government Accounting Standards Board's Statements 43 and 45, which cover accounting and financial reporting for post-employment benefits other than pensions, outline various requirements of a funding schedule that will amortize the unfunded actuarial liability and cover normal costs. Amortization of the unfunded actuarial liability is to be based on a schedule that extends no longer than 30 years. The contribution towards the amortization of the unfunded actuarial liability may be made in level payments or in payments increasing at the same rate as assumed salary increases.

In the amortization schedule shown on the following page, the amortization of the unfunded accrued liability is made in installments that increase annually by 5%. The normal cost is expected to increase at a rate that reflects both the assumed ultimate health care trend rate and a modest amount of growth in the active population for the next few years. The contributions were computed assuming that the contribution is paid on July 1, (i.e., at the beginning of the fiscal year). Below is a comparison of the forecasted Annual Required Contributions, computed under discount rates of 8.25% and 3.75%.

Also included is a forecast of the pay-as-you-go amount. If the State chooses to not fund the obligation, the difference between the pay-as-you-go amount and the actuarially determined contribution would be recorded as a liability on the financial statements. The liability will grow with interest and new net differences in successive years.

## SECTION V – FORECASTS

## FORECAST OF FUNDING AND GASB EXPENSE UNDER A DISCOUNT RATE OF 8.25%

Fiscal Year Ending in	Normal Cost	Amortization of the Unfunded Actuarial Liability	Total State ARC	Pay-as-you-go	Difference
2008	11,336,486	15,759,345	27,095,831	16,390,080	10,705,751
2009	12,072,424	16,547,312	28,619,736	17,971,228	10,648,508
2010	12,597,912	17,374,678	29,972,590	19,762,383	10,210,207
2011	13,161,992	18,243,412	31,405,404	21,465,278	9,940,126
2012	13,685,395	19,155,582	32,840,977	23,009,525	9,831,452
2013	14,301,758	20,113,361	34,415,119	24,626,218	9,788,901
2014	15,038,585	21,119,030	36,157,615	26,312,877	9,844,738
2015	15,825,815	22,174,981	38,000,796	28,018,752	9,982,044
2016	16,604,767	23,283,730	39,888,497	29,749,850	10,138,647
2017	17,381,083	24,447,917	41,829,000	31,594,271	10,234,729
2018	18,505,395	25,670,312	44,175,707	33,689,806	10,485,901
2019	19,468,931	26,953,828	46,422,759	35,656,279	10,766,480
2020	20,513,697	28,301,519	48,815,216	37,931,735	10,883,481
2021	21,540,865	29,716,595	51,257,460	40,300,496	10,956,964
2022	22,666,222	31,202,425	53,868,647	42,918,412	10,950,235
2023	23,904,992	32,762,546	56,667,538	45,600,832	11,066,706
2024	25,156,121	34,400,674	59,556,795	48,335,721	11,221,074
2025	26,403,752	36,120,707	62,524,459	51,394,732	11,129,727
2026	27,724,033	37,926,743	65,650,776	54,527,685	11,123,091
2027	29,121,807	39,823,080	68,944,887	57,902,155	11,042,732
2028	30,636,070	41,814,234	72,450,304	61,395,107	11,055,197
2029	32,223,667	43,904,946	76,128,613	64,888,879	11,239,734
2030	33,935,951	46,100,193	80,036,144	68,522,732	11,513,412
2031	35,619,221	48,405,202	84,024,423	72,390,629	11,633,794
2032	37,403,532	50,825,463	88,228,995	76,353,007	11,875,988
2033	39,283,323	53,366,736	92,650,059	80,373,693	12,276,366
2034	41,272,533	56,035,073	97,307,606	84,588,844	12,718,762
2035	43,377,052	58,836,826	102,213,878	88,920,537	13,293,341
2036	45,564,001	61,778,667	107,342,668	93,082,614	14,260,054
2037	47,802,703	64,867,601	112,670,304	97,612,963	15,057,341
2038	50,161,217	0	50,161,217	102,373,234	-52,212,017

## SECTION V – FORECASTS

## FORECAST OF FUNDING AND GASB EXPENSE UNDER A DISCOUNT RATE OF 3.75%

Fiscal Year Ending in	Normal Cost	Amortization of the Unfunded Actuarial Liability	Total State ARC	Pay-as-you-go	Difference
2008	30,443,640	16,841,263	47,284,903	16,390,080	30,894,823
2009	32,419,969	17,683,326	50,103,296	17,971,228	32,132,068
2010	33,831,145	18,567,492	52,398,637	19,762,383	32,636,254
2011	35,345,957	19,495,867	54,841,824	21,465,278	33,376,546
2012	36,751,533	20,470,660	57,222,193	23,009,525	34,212,668
2013	38,406,749	21,494,193	59,900,942	24,626,218	35,274,724
2014	40,385,466	22,568,903	62,954,369	26,312,877	36,641,492
2015	42,499,538	23,697,348	66,196,886	28,018,752	38,178,134
2016	44,591,379	24,882,216	69,473,595	29,749,850	39,723,745
2017	46,676,142	26,126,326	72,802,469	31,594,271	41,208,198
2018	49,695,433	27,432,643	77,128,076	33,689,806	43,438,270
2019	52,282,967	28,804,275	81,087,242	35,656,279	45,430,963
2020	55,088,641	30,244,489	85,333,130	37,931,735	47,401,395
2021	57,847,056	31,756,713	89,603,769	40,300,496	49,303,273
2022	60,869,153	33,344,549	94,213,702	42,918,412	51,295,290
2023	64,195,816	35,011,776	99,207,592	45,600,832	53,606,760
2024	67,555,669	36,762,365	104,318,034	48,335,721	55,982,313
2025	70,906,127	38,600,483	109,506,611	51,394,732	58,111,879
2026	74,451,685	40,530,507	114,982,192	54,527,685	60,454,507
2027	78,205,346	42,557,033	120,762,379	57,902,155	62,860,224
2028	82,271,833	44,684,884	126,956,718	61,395,107	65,561,611
2029	86,535,256	46,919,129	133,454,385	64,888,879	68,565,506
2030	91,133,520	49,265,085	140,398,605	68,522,732	71,875,873
2031	95,653,869	51,728,339	147,382,208	72,390,629	74,991,579
2032	100,445,558	54,314,756	154,760,314	76,353,007	78,407,307
2033	105,493,655	57,030,494	162,524,149	80,373,693	82,150,456
2034	110,835,592	59,882,019	170,717,611	84,588,844	86,128,767
2035	116,487,186	62,876,120	179,363,306	88,920,537	90,442,769
2036	122,360,143	66,019,926	188,380,068	93,082,614	95,297,454
2037	128,372,079	69,320,922	197,693,001	97,612,963	100,080,038
2038	134,705,766	0	134,705,766	102,373,234	32,332,532

## SECTION VI - ACTUARIAL ASSUMPTIONS AND METHODS

## VERMONT STATE EMPLOYEES – ALL GROUPS

***Assumed investment return*** 8.25% per year, net of investment expenses, is the assumed rate of return on assets accumulated in the System's trust for benefit payments; 3.75% per year for a non-funded plan.

***Actuarial cost method:*** Projected Unit Credit

***Medical care and state share inflation:***

Fiscal Year Ending	Inflation Rate
2008	7.0%
2009	6.0
2010 & After	5.0

***Amortization period:*** Closed basis. Thirty-year amortization starting in the fiscal year ending in 2008 with payments increasing by 5% annually.

***Retirement eligibility:*** At termination of employment, employee must be eligible for retirement as prescribed by the terms of the State Employees' Retirement System of Vermont to receive medical coverage:

Group A: Earlier of (a) age 55 with 5 years of service, and (b) 30 years of service.

Group C: Earlier of (a) age 55, (b) age 50 with 20 years of service, and (c) 30 years of service.

Group D: Age 55 with 5 years of service.

Group F: Earlier of (a) age 55 with 5 years of service, and (b) 30 years of service.

## SECTION VI - ACTUARIAL ASSUMPTIONS AND METHODS

### ***Health plans:***

Retirees without Medicare may select from four plans: Total Choice, Health Guard PPO, SelectCare POS and SafteyNet. Retirees with Medicare may select from two plans: Total Choice and Health Guard.

### ***Pre-age 65 retirees:***

Current retirees who are under age 65 are assumed to remain in their current medical plan until age 65, at which time they enter the average plan provided to current post-65 retirees.

Current active employees who are assumed to retire prior to age 65 are valued with a weighted-average premium. This weighted-average premium is based on the medical plan coverage of current retirees under age 65. The weighted average premium includes an adjustment based on age to account for the implicit subsidy of older employees' true benefit cost.

At age 65, all participants are assumed to participate in post-65 plans in the same proportions as current retirees over age 65.

Retirees and beneficiaries remain in their current medical plan until death. If a retiree predeceases his/her beneficiary, the beneficiary will continue to have coverage until his or her death. However, the State does not cover any of the costs of coverage.

### ***Post-age 65 retirees:***

Current retirees over age 65 remain in their current medical plan until death. Beneficiaries remain in their current medical plan until death. Therefore, if the retiree predeceases the beneficiary, the beneficiary will continue to have coverage until his or her death. However, the State does not cover any of the costs of coverage.

### ***Coverage:***

It is assumed that 80% of current active employees will elect retiree medical coverage.

## SECTION VI - ACTUARIAL ASSUMPTIONS AND METHODS

### *Medical plan costs:*

Estimated net per capita incurred claim costs for 2007-08 at age 64 and 65 was \$6,116 and \$1,743, respectively. Per capita claims costs at other ages reflect estimated underlying costs based on Morbidity. It is assumed that future retirees are Medicare eligible at age 65. Per capita costs were developed from the State developed monthly costs. Claims information was not available. The plans are experienced-rated.

Future employee cost sharing is assumed to be a constant percentage of total costs.

### *Age-based morbidity:*

Per capita costs are adjusted to reflect expected cost increases related to age. The increase in the net incurred claims was assumed to be:

<u>Age</u>	<u>Annual Increase Retiree</u>
49 and below	2.6%
50-54	3.2%
55-59	3.4%
60-64	3.7%
65-69	3.2%
70-74	2.4%
75-79	1.8%
80 and over	0.0%

## SECTION VI - ACTUARIAL ASSUMPTIONS AND METHODS

## Groups A, D and F

*Separations from service:*

Representative values of the assumed annual rates of withdrawal, vested retirement, disability and death are as follows:

Age	Withdrawal and Vested Retirement <sup>1</sup>	Disability	Death	
			Men	Women
25	3.15%	.03%	.03%	.02%
30	2.52	.04	.04	.02
35	2.10	.05	.07	.04
40	1.95	.08	.10	.06
45	1.73	.13	.13	.09
50	1.44	.21	.18	.14
55	2.52	.35	.25	.23
59	2.52	.52	.37	.34
60	2.50	.57	.41	.37
61	2.49	.62	.46	.41

<sup>1</sup> Increased during first 10 years of service.

Retirement <sup>2</sup>					
Age	Rate	Age	Rate	Age	Rate
55	5.0%	60	7.0%	65	25.0%
56	4.2	61	14.0	66	15.0
57	5.6	62	28.0	67	17.5
58	6.3	63	17.5	68	17.5
59	7.0	64	17.5	69	20.0
				70	100.0

<sup>2</sup> All Group A and D members are assumed to retire when first eligible.

*Deaths after retirement:*

According to the RP-2000 Mortality Tables for Healthy Annuitants for retirees and beneficiaries.

## SECTION VI - ACTUARIAL ASSUMPTIONS AND METHODS

### Groups A, D and F

<i>Administrative expenses:</i>	No provision made; expenses of the System are paid by the State.
<i>Spouse's age:</i>	Husbands are assumed to be 3 years older than their wives.
<i>Covered spouses:</i>	75.4% (71.4% for Group F) of male members and 64.0% (63.1% for Group F) of female members are assumed to be covering spouses.

## SECTION VI - ACTUARIAL ASSUMPTIONS AND METHODS

### Group C

***Separations before retirement:***

Representative values of the assumed annual rates of withdrawal, vested retirement, disability and death are as follows:

Age	Withdrawal and Vested Retirement <sup>1</sup>	Disability	Death	
			Men	Women
25	3.60%	.15%	.03%	.02%
30	3.60	.20	.04	.02
35	3.60	.27	.07	.04
40		.40	.10	.06
45		.65	.13	.09
50		1.09	.18	.14
55		1.82	.25	.23
60		2.93	.41	.37

<sup>1</sup> Increased during first 5 years of service.

***Early and normal retirement rates:***

All members are assumed to retire when first eligible.

***Deaths after retirement:***

According to the RP-2000 Mortality Tables for Healthy Annuitants for retirees and beneficiaries.

***Future expenses:***

No provision made; expenses of the System are paid by the State outside of the plan.

***Spouse's age:***

Husbands are assumed to be 3 years older than their wives.

***Covered spouses:***

75.4% of male members and 64.0% of female members are assumed to be covering spouses.