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Commonwealth of Pennsylvania Actuarial Valuation of the Post- Retirement Medical Plan

HayGroup®



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Section 1 - Executive Summary

The Commonwealth of Pennsylvania (the Commonwealth) sponsors two health care plans for eligible retirees. Eligible Commonwealth retirees and their dependents may continue subsidized health care coverage through the Commonwealth for the life of the retiree in the Retired Employee Health Program (REHP). In addition, eligible State Police annuitants and their dependents may continue coverage through the Retired Pennsylvania State Police Program (RPSPP) during the life of the retiree.

The Commonwealth adopted GASB 45 effective July 1, 2007. This valuation includes calculations made as of July 1, 2013 using census data collected as of December 31, 2012 and health care claims costs for calendar 2012, for current retirees and future retirees eligible for coverage under these plans. The results as of July 1, 2013 were then projected using standard actuarial techniques to determine the liabilities and costs as of June 30, 2012 and June 30, 2013 and OPEB costs as of June 30, 2013 and June 30, 2014.

GASB 45

Before July 1, 2007, the Commonwealth reported the cost of retiree medical benefits on a cash basis. Beginning July 1, 2007, the Commonwealth implemented the new Governmental Accounting Standards Board (GASB) standard (Statement Number 45) on *Accounting and Financial Reporting by Employers for Post-employment Benefits Other Than Pensions*. The standard required the Commonwealth to account for these benefits on a full accrual basis. A description of the GASB standard can be found in Section 2.

Benefit Plans

This valuation covers two separate health plans sponsored by the Commonwealth. The larger plan is the REHP which covers eligible retired Commonwealth employees and their dependents. The smaller plan is the RPSPP which covers eligible retired State Police enlisted members and their dependents. The eligibility conditions and benefit provisions for these two plans differ materially; therefore the valuation developed separate results for each plan and its covered population. A description of the plan provisions can be found in Section 7.

Health Care Trend Rates

The accounting standard requires employers to anticipate future health care costs by adjusting today's per capita health care costs with projected health care trend rates. As shown in Appendix A, health care cost increases have outpaced general inflation and the annual rate of change has fluctuated significantly over time.

It is difficult to accurately predict health care cost increases even one or two years into the future. The assumed increase in health care costs varies by type of benefit and year.

The medical trend assumptions used in the valuation were developed using the Society of Actuaries (SOA) Long-Run Medical Cost Trend Model (Version 11.1) developed by professor Getzen and approved by SOA. The following assumptions were used as input variables into this model:

Rate of Inflation	2.75%
Rate of Growth in Real Income/ GDP per capita	1.3%
Income Multiplier for Health Spending	1.4
Extra Trend due to Technology and other factors	1.1%
Health Share of GDP Resistance Point	25.0%
Year for Limiting Cost Growth to GDP Growth	2075

The SOA Long-Run Medical Cost Trend Getzen Model and its baseline projection are based on an econometric analysis of historical U.S. medical expenditures and the judgments of experts in the field. The long-run baseline projection and input variables were developed under the guidance of the SOA Project Oversight Group.

Tables 1.1 and 1.2 show the health care cost trends used in this valuation compared to the trends used in the previous valuation for REHP and RPSPP, respectively. The current trends are outputs of the SOA Long-Run Medical Cost Trend Getzen Model. The set of health care trend rates has an initial health care cost trend rate of 6.2 percent and declines gradually, over 70 years, to an ultimate rate of 3.8 percent in 2082. Under these assumptions, a cost of \$1,000 in 2012 will be a cost of \$2,777 in 2030. This is a change in methodology from the trends used in the previous valuation.

Year	Medicare-Retiree Medical Benefits		Non-Medicare-Retiree Medical Benefits		Pharmacy Benefits	
	<i>Current</i>	<i>Previous</i>	<i>Current</i>	<i>Previous</i>	<i>Current</i>	<i>Previous</i>
2012	5.70%	13.00%	6.20%	7.00%	6.20%	5.00%
2013	5.70%	12.00%	6.10%	6.50%	6.10%	5.00%
2014	5.70%	11.00%	6.00%	6.00%	6.00%	5.00%
2015	5.90%	10.00%	5.90%	5.50%	5.90%	5.00%
2016	5.80%	9.10%	5.80%	5.00%	5.80%	5.00%

Table 1.1
Health Care Cost Trend Rate Assumptions for REHP

Year	Medicare-Retiree Medical Benefits		Non-Medicare-Retiree Medical Benefits		Pharmacy Benefits	
2017	5.70%	8.40%	5.70%	5.00%	5.70%	5.00%
2018	5.70%	7.70%	5.70%	5.00%	5.70%	5.00%
2019	5.70%	7.10%	5.70%	5.00%	5.70%	5.00%
2020	5.70%	6.60%	5.70%	5.00%	5.70%	5.00%
2025	5.60%	4.75%	5.60%	4.75%	5.60%	4.75%
2030	4.80%	4.75%	4.80%	4.75%	4.80%	4.75%
2050	4.50%	4.75%	4.50%	4.75%	4.50%	4.75%
2070	4.20%	4.80%	4.20%	4.75%	4.20%	4.75%
2082+	3.80%	4.75%	3.80%	4.75%	3.80%	4.75%

Table 1.2
Health Care Cost Trend Rate Assumptions for RPSPP

Year	Medical Benefits		Pharmacy Benefits		Dental Benefits		Part B Premiums	
	Current	Previous	Current	Previous	Current	Previous	Current	Previous
2012	6.20%	6.00%	6.20%	5.75%	6.20%	6.00%	6.00%	-0.70%
2013	6.10%	5.00%	6.10%	5.50%	6.10%	6.00%	0.00%	2.70%
2014	6.00%	5.00%	6.00%	5.25%	6.00%	5.00%	9.10%	3.00%
2015	5.90%	5.00%	5.90%	5.00%	5.90%	5.00%	3.60%	2.30%
2016	5.80%	5.00%	5.80%	5.00%	5.80%	5.00%	3.30%	3.30%
2017	5.70%	5.00%	5.70%	5.00%	5.70%	5.00%	4.50%	3.50%
2018	5.70%	5.00%	5.70%	5.00%	5.70%	5.00%	4.90%	3.80%
2019	5.70%	5.00%	5.70%	5.00%	5.70%	5.00%	4.80%	3.90%
2020	5.70%	5.00%	5.70%	5.00%	5.70%	5.00%	5.30%	4.90%
2025	5.60%	4.75%	5.60%	4.75%	5.60%	4.75%	4.00%	4.75%
2030	4.80%	4.75%	4.80%	4.75%	4.80%	4.75%	4.00%	4.75%
2050	4.50%	4.75%	4.50%	4.75%	4.50%	4.75%	4.00%	4.75%
2070	4.20%	4.75%	4.20%	4.75%	4.20%	4.75%	4.00%	4.75%
2082+	3.80%	4.75%	3.80%	4.75%	3.80%	4.75%	4.00%	4.75%

The actuarial assumptions are described in Section 5, and shown in Appendix B.

Funding

The Commonwealth established the OPEB Investment Pool during the fiscal year ended June 30, 2008 to advance-fund a portion of the REHP and RPSPP ARC for the fiscal year ended June 30, 2008. A description of the current funding policy and market value of assets is provided in Section 4.

Key Valuation Results

We have measured the post-retirement medical liabilities for the retirees currently covered by the post-retiree health plans and for employees covered under the Commonwealth health plan for active employees as of June 30, 2012 and June 30, 2013. The liabilities for the REHP and RPSPP were calculated using a discount rate of 4.75 percent.

In Table 1.3 we have shown three measures of the liability: the present value of future benefits (PVB), the actuarial accrued liability (AAL), and the normal cost (NC). The present value of future benefits is the discounted present value of all future employer-paid health premiums for both current and future retirees. The actuarial accrued liability is the portion of the present value of future benefits attributable to employee service rendered prior to measurement date. The normal cost is the portion of the present value of benefits earned during the Fiscal year. The table also shows the market value of assets and the unfunded actuarial accrued liability (UAAL). The complete valuation results are shown Section 3.

Table 1.3
Postretirement Medical Benefit Valuation Results
for REHP and RPSPP
(Amounts in \$millions)

	As of June 30, 2012	As of June 30, 2013
Assumptions		
Discount rate	4.75%	4.75%
Healthcare cost trend rates		
• Medical benefit initial trend rate	6.20%	6.10%
• Pharmacy benefit initial trend rate	6.20%	6.10%
• Dental benefit initial trend rate	6.20%	6.10%
• Ultimate rate	3.80%	3.80%
Valuation Results		
1. Present Value of Future Benefits	\$20,808.90	\$21,168.29
2. Actuarial Accrued Liability	15,896.97	16,422.23
3. Assets	132.28	151.54*
4. Unfunded Actuarial Accrued Liability (actuarial accrued liability less assets) (2. – 3.)	15,764.69	16,270.69
5. Normal Cost	381.08	395.56

*Assets as of May 31, 2013

** Numbers might not add due to rounding

Annual Required Contribution and Annual OPEB Cost

For an organization that fully funds the ARC each year, the Annual OPEB cost (AOC) is simply the sum of the Normal Cost and the Amortization of the Unfunded Actuarial Accrued Liability.

The Annual OPEB Cost is the sum of four parts:

- i. the Normal Cost,
- ii. the Amortization payment on the Unfunded Actuarial Accrued Liability,
- iii. interest on the unfunded AOC (or overfunded AOC) if any, and
- iv. an adjustment to the AOC to prevent double accrual of principal payments on the unfunded actuarial accrued liability (if any).

The Commonwealth has decided to amortize the unfunded actuarial accrued liability over 30 years as a level percent of pay using 30 year open amortization. (fresh start amortization each year).

Table 1.4 shows the derivation of the Annual Required Contribution and Annual OPEB Cost.

Table 1.4 Postretirement Medical Benefit Valuation Results Annual Required Contribution and AOC for REHP and RPSPP (Amounts in \$millions)		
Annual OPEB Cost (AOC)	FY 2012/2013	FY 2013/2014
1 Normal Cost	381.08	395.56
2 Amortization Cost	690.89	713.07
3 Annual Required Contribution	1,071.97	1,108.63
4 Interest on unfunded (overfunded) ARC	74.02	92.82
5 ARC adjustment	(68.30)	(85.63)
6 Total Annual OPEB Cost	1,077.69	1,115.82

*Numbers might not add due to rounding

Table 1.5 shows the development of the Net OPEB Liability. The Net OPEB Liability is the excess of the AOC cost over the amount funded by the employer. As this is a projection for the amounts as of June 30, 2013 and June 30, 2014, the Net OPEB Liability is based on an expected employer contributions equal to expected benefit payments.

Table 1.5
Postretirement Medical Benefit Valuation Results
Net OPEB Liability for REHP and RPSP
(Amounts in \$millions)

	FY 2012/2013	FY 2013/2014
1 Net OPEB Liability as of July 1	\$1,558.38	\$1,954.03
2 Annual OPEB Cost	1,077.69	1,115.82
3 Expected employer contribution	682.04	639.14
4 Net OPEB Liability as of June 30	1,954.03	2,430.71

*Numbers might not add due to rounding

The expected employer contribution is defined as

- amounts paid for claims and premiums incurred and paid during the year
- advance funding contributions to the OPEB Investment Pool

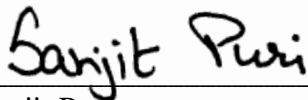
Actuarial Certification

The Commonwealth retained Hay Group to perform an actuarial valuation of the Post-Retirement Medical Plan to provide an estimate of the actuarial accrued liability and the Annual Required Contribution in accordance with GASB standards numbered 43 and 45. Use of the valuation results for other purposes may not be appropriate.

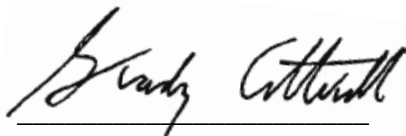
This valuation has been conducted in accordance with generally accepted actuarial principles and practices.

The results shown in this report are reasonable actuarial results. However, a different set of results could also be considered reasonable actuarial results. Thus, reasonable results differing from those presented in this report could have been developed by selecting different points for various assumptions.

The actuaries certifying to this valuation are members of the Society of Actuaries and other professional actuarial organizations, and meet the General Qualification Standards of the American Academy of Actuaries for purposes of issuing Statements of Actuarial Opinion.

A handwritten signature in black ink, reading "Sanjit Puri", is positioned above a horizontal line. The signature is written in a cursive, slightly slanted style.

Sanjit Puri
Associate of the Society of Actuaries
Member of the American Academy of Actuaries
Hay Group
August 21, 2013

A handwritten signature in black ink, reading "Grady Catterall", is positioned above a horizontal line. The signature is written in a cursive, slightly slanted style.

Grady Catterall
Fellow of the Society of Actuaries
Member of the American Academy of Actuaries
Hay Group
August 21, 2013

Section 2 - Description of GASB 45

Governmental Accounting Standards Board (GASB)

In June, 2004, the Governmental Accounting Standards Board (GASB) issued its long awaited standard on Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions (OPEBs).

The standard covers both post-retirement and post-employment benefits. The type of benefits covered includes:

- Medical
- Dental
- Vision
- Hearing
- Life insurance
- Long term disability
- Long term care

However, if any of these benefits are provided through a pension plan they would be accounted for under GASB 25 – otherwise they will be accounted for under GASB 45.

The Commonwealth adopted the standard beginning with the 2007-2008 financial reporting year.

The purpose of the standard is to treat post-employment benefits in a manner similar to pensions for accounting purposes. Governmental employers should recognize that OPEBs constitute compensation for employee service and they should recognize the cost of benefits during the periods when employee service is rendered. By accounting for OPEBs, GASB believes the accounting statement will improve the relevance and usefulness of financial reporting, provide information about the size of the liabilities and the extent to which they are funded, and ensure systematic accrual-basis measurement over employee service.

While the standard requires governmental employers to adopt accrual accounting, the standard sets out a broad range of options for employers. These options include:

- Timing of adoption
- Actuarial cost method
- Period for amortizing the unfunded liability
- Measurement date
- Frequency of valuations

The most common and most expensive of the OPEBs are retiree medical benefits, which provide a valuable component in employees' retirement benefits program. Most governmental employers fund their retiree medical plans on a pay-as-you-go basis. The GASB standard does not require employers to advance fund these benefits; however certain aspects of the measurement provide benefits for employers that fund the OPEB.

Actuarial Cost Method

A fundamental principle in financing the liabilities of any retirement program is that the cost of the benefits should be related to the period in which benefits are earned, rather than to the period of benefit distribution. There are several acceptable actuarial methods prescribed in the GASB standard that are acceptable under the GASB standard. The Commonwealth directed the Hay Group to identify the actuarial cost method that would produce the lowest Annual Required Contribution. We evaluated each of the methods and determined that the Projected Unit Credit (PUC) Cost Method produced the lowest ARC/AOC.

Under the projected unit credit cost method, the actuary develops the discounted present value of all future benefit payments. For a retiree, this amount is the Actuarial Accrued Liability. For an employee that has not yet retired, the Actuarial Accrued Liability is determined as the ratio of the employee's service as of the valuation date to the expected service at retirement. As the valuation uses rates of retirement, the PUC method determines the Actuarial Accrued Liability as the weighted sum of the pro-rata calculations for expected retirements at each expected retirement age.

Actuarial Accrued Liability

The actuarial accrued liability is that portion of the present value of projected benefits which has been accrued during the employee's working life from the date of hire to the valuation date. Another way of viewing this liability is as the portion of the present value of projected benefits that will not be funded by future normal costs. Therefore, as long as participants enter the system with no past service credit (as is assumed in this case), there is no actuarial liability for a new entrant. Furthermore, the full present value of benefits is accrued by the end of each employee's working life.

The difference between the actuarial accrued liability and the funds accumulated as of the valuation date is referred to as the unfunded actuarial accrued liability. Unfunded actuarial accrued liabilities generally exist when (1) the liabilities are not funded, (2) benefits have been earned for periods in which no normal cost has been paid or (3) the amounts that have been funded were inadequate because of losses, changes in assumptions, changes in the funding method, or benefit improvements. The unfunded actuarial accrued liability equals the actuarial accrued liability less the value of the fund.

Development of the Normal Cost

The normal cost represents the benefits earned during the current reporting period. As stated in the previous section, the projected unit credit actuarial cost method is used in determining the normal cost.

Amortization Method

GASB 45 allows for the use of either a level dollar amortization or a level percentage of pay amortization. Members in the REHP who retired after July 1, 2005 are required to pay contributions based on their final salary. Given the use of pay for cost-sharing purposes with REHP members, the Commonwealth chose to use the level percentage of payroll in determining the amortization cost.

Section 3 - Valuation Results

Table 3.1 shows the combined present value of future benefits, actuarial accrued liability, assets, unfunded actuarial accrued liability and the normal cost, as of June 30, 2012 and as of June 30, 2013.

Building on these values the table shows the Annual Required Contribution and Annual OPEB Cost amounts for FY 2012/13 and FY 2013/14.

Table 3.2 shows the results for current and future members of the REHP as of June 30, 2012 and June 30, 2013.

Table 3.3 shows the results for current and future members of the RPSPP as of June 30, 2012 and June 30, 2013.

Table 3.1
Post-Retirement Medical Valuation
Total for REHP and RPSPP
(dollars in millions)

	As of June 30, 2012	As of June 30, 2013
Present Value of Future Benefits		
Current Retirees	10,525.24	10,396.16
Future Retirees	10,283.66	10,772.13
Total	\$ 20,808.90	\$ 21,168.29
Actuarial Accrued Liability		
Current Retirees	10,525.24	10,396.16
Future Retirees	5,371.73	6,026.07
Total	\$ 15,896.97	\$ 16,422.23
Assets	132.28	151.54*
Unfunded Actuarial Accrued Liability	\$ 15,764.69	\$ 16,270.69
	FY 2012/13	FY2013/14
Amortization Cost	690.89	713.07
Normal Cost	381.08	395.56
Total Annual Required Contribution	1,071.97	1,108.63
Interest on Unfunded (Over funded) ARC	74.02	92.82
ARC Adjustment	(68.30)	(85.63)
Annual OPEB Cost	\$ 1,077.69	\$ 1,115.82
Expected Employer Funding		
PAYG	682.04**	639.14**
Advance Funding	-	-
Total	\$ 682.04	\$ 639.14
Net OPEB Liability		
Amount at Beginning of Year	1,558.38	1,954.03
Annual OPEB Cost	1,077.69	1,115.82
Expected Employer Funding	682.04	639.14
Amount at End of Year	\$ 1,954.03	\$ 2,430.71

*Assets as of May 31, 2013

** Estimated

**Numbers might not add due to rounding

Table 3.2
Post-Retirement Medical Valuation of the REHP
(dollars in millions)

	As of June 30, 2012	As of June 30, 2013
Present Value of Future Benefits		
Current Retirees	8,551.70	8,418.59
Future Retirees	8,219.55	8,609.98
Total	\$ 16,771.25	\$ 17,028.57
Actuarial Accrued Liability		
Current Retirees	8,551.70	8,418.59
Future Retirees	4,292.00	4,815.45
Total	\$ 12,843.70	\$ 13,234.04
Assets	71.63	82.06*
Unfunded Actuarial Accrued Liability	\$ 12,772.07	\$ 13,151.98
	FY 2012/13	FY2013/14
Amortization Cost	559.74	576.39
Normal Cost	305.09	316.68
Total Annual Required Contribution	864.83	893.07
Interest on Unfunded (Over funded) ARC	55.80	67.94
ARC Adjustment	(51.49)	(62.68)
Annual OPEB Cost	\$ 869.14	\$ 898.33
Expected Employer Funding		
PAYG	613.66**	550.49**
Advance Funding	-	-
Total	\$ 613.66	\$ 550.49
Net OPEB Liability		
Amount at Beginning of Year	1,174.79	1,430.27
Annual OPEB Cost	869.14	898.33
Expected Employer Funding	613.66	550.49
Amount at End of Year	\$ 1,430.27	\$ 1,778.11

*Assets as of May 31, 2013

** Estimated

**Numbers might not add due to rounding

Table 3.3
Post-Retirement Medical Valuation of the RPSPP
(dollars in millions)

	As of June 30, 2012	As of June 30, 2013
Present Value of Future Benefits		
Current Retirees	1,973.54	1,977.57
Future Retirees	2,064.11	2,162.15
Total	\$ 4,037.65	\$ 4,139.72
Actuarial Accrued Liability		
Current Retirees	1,973.54	1,977.57
Future Retirees	1,079.73	1,210.62
Total	\$ 3,053.27	\$ 3,188.19
Assets	60.65	69.48*
Unfunded Actuarial Accrued Liability	\$ 2,992.62	\$ 3,118.71
	FY 2012/13	FY2013/14
Amortization Cost	131.15	136.68
Normal Cost	75.99	78.88
Total Annual Required Contribution	207.14	215.56
Interest on Unfunded (Over funded) ARC	18.22	24.88
ARC Adjustment	(16.81)	(22.95)
Annual OPEB Cost	\$ 208.55	\$ 217.49
Expected Employer Funding		
PAYG	68.38**	88.65**
Advance Funding	-	-
Total	\$ 68.38	\$ 88.65
Net OPEB Liability		
Amount at Beginning of Year	383.59	523.76
Annual OPEB Cost	208.55	217.49
Expected Employer Funding	68.38	88.65
Amount at End of Year	\$ 523.76	\$ 652.60

*Assets as of May 31, 2013

** Estimated

**Numbers might not add due to rounding

Allocation of the Annual OPEB Cost

For financial planning and reporting purposes, the Commonwealth required that the valuation report include an allocation of the Annual OPEB Cost (AOC). A separate cost for the RPSPP was developed just for State Police enlisted members. The allocation of the REHP AOC was based on the ratio of the projected employees' salaries in each department supporting the government business activity or component unit or organization, to the total projected salaries for all employees.

Table 3.4 shows the allocated AOC for FY 2012/13 and Table 3.5 shows the allocated AOC for FY 2013/14.

Table 3.4
Commonwealth of Pennsylvania
Post Retirement Benefit - Allocation of Annual OPEB Cost
FY 2012-13

	REHP Active Employee Salary Total (\$thousands)	RPSPP Active Employee Salary Total (\$thousands)	REHP Annual OPEB Cost (\$thousands)	RPSPP Annual OPEB Cost (\$thousands)
AOC Allocated to:				
Government Activities				
Direction and supportive services	280,100		58,948	
Protection of persons and property	1,431,448	377,209	301,252	207,673
Public education	27,512		5,790	
Health and human services	1,113,214		234,278	
Economic development	66,750		14,048	
Transportation	521,657		109,784	
Recreation and cultural enrichment	153,463		32,297	
Government Activities Subtotal	3,594,144	377,209	756,396	207,673
Business-type Activities				
State Lottery Fund	20,385		4,290	
Minority Business Development Fund	126		27	
Machinery and Equipment Loan Fund	341		72	
Small Business First Fund	293		62	
Rehabilitation Center Fund	9,623		2,025	
State Workmen's Insurance Fund	16,261		3,422	

Table 3.4
Commonwealth of Pennsylvania
Post Retirement Benefit - Allocation of Annual OPEB Cost
FY 2012-13

Coal & Clay Mine Subsidence Insurance	1,108		233	
State Stores Fund	165,658	1,596	34,863	879
Purchasing Fund	4,746		999	
Manufacturing Fund	14,129		2,973	
Historical Preservation Fund	699		147	
Business-type Activities Subtotal	233,369	1,596	49,113	879
Fiduciary Activities				
State Employees' Retirement Fund	10,643		2,240	
Underground Storage Tank Indemnific	520		110	
School Employees' Retirement Fund	18,843		3,965	
Med Care Avail & Reduct of Err Fund	2,576		542	
Fiduciary Activities Subtotal	32,581	-	6,857	-
Component Units				
Ben Franklin Technology Development	258		54	
Port of Pittsburgh Commission Fund	388		82	
Pennvest	1,978		416	
Philadelphia Regional Port Authority	5,398		1,136	
Patient Safety Trust Fund	1,155		243	
State Public School Building Authority	704		148	
State System of Higher Education	133,624		28,122	
Thaddeus Stevens	5,992		1,261	
PHEAA	118,897		25,022	
Component Units Subtotal	268,393	-	56,484	-
External Organizations				
Pennsylvania Municipal Retirement Fund	1,379		290	
External Organizations Subtotal	1,379	-	290	-
Total REHP AOC Allocated	4,129,867		869,140	
Total RPSPP AOC Allocated		378,805		208,552

*Numbers may not add due to rounding

Table 3.5 shows the allocated Annual OPEB Cost for FY 2013/14.

Table 3.5 Commonwealth of Pennsylvania Post Retirement Benefit - Allocation of Annual OPEB Cost FY 2013-14				
	REHP Active Employee Salary Total (\$thousands)	RPSPP Active Employee Salary Total (\$thousands)	REHP Annual OPEB Cost (\$thousands)	RPSPP Annual OPEB Cost (\$thousands)
AOC Allocated to:				
Government Activities				
Direction and supportive services	289,203		60,927	
Protection of persons and property	1,477,970	389,468	311,370	216,573
Public education	28,406		5,984	
Health and human services	1,149,393		242,147	
Economic development	68,919		14,519	
Transportation	538,611		113,471	
Recreation and cultural enrichment	158,451		33,381	
Government Activities Subtotal	3,710,954	389,468	781,799	216,573
Business-type Activities				
State Lottery Fund	21,048		4,434	
Minority Business Development Fund	130		27	
Machinery and Equipment Loan Fund	352		74	
Small Business First Fund	302		64	
Rehabilitation Center Fund	9,935		2,093	
State Workmen's Insurance Fund	16,790		3,537	
Coal and Clay Mine Subsidence	1,144		241	
State Stores Fund	171,042	1,648	36,036	917
Purchasing Fund	4,900		1,032	
Manufacturing Fund	14,588		3,073	
Historical Preservation Fund	722		152	
Business-type Activities Subtotal	240,954	1,648	50,763	917

Table 3.5
Commonwealth of Pennsylvania
Post Retirement Benefit - Allocation of Annual OPEB Cost
FY 2013-14

	REHP Active Employee Salary Total (\$thousands)	RPSPP Active Employee Salary Total (\$thousands)	REHP Annual OPEB Cost (\$thousands)	RPSPP Annual OPEB Cost (\$thousands)
Fiduciary Activities				
State Employees' Retirement Fund	10,989		2,315	
Underground Storage Tank Indemnific	537		113	
School Employees' Retirement Fund	19,455		4,099	
Med Care Avail & Reduct of Err Fund	2,659		560	
Fiduciary Activities Subtotal	33,640	-	7,087	-
Component Units				
Ben Franklin Technology Development	266		56	
Port of Pittsburgh Commission Fund	401		84	
Pennvest	2,042		430	
Philadelphia Regional Port Authority	5,573		1,174	
Patient Safety Trust Fund	1,192		251	
State Public School Building Authority	727		153	
State System of Higher Education	137,967		29,068	
Thaddeus Stevens	6,186		1,303	
PHEAA	122,761		25,862	
Component Units Subtotal	277,116	-	58,381	-
External Organizations				
Pennsylvania Municipal Retirement Fund	1,424		300	
External Organizations Subtotal	1,424	-	300	-
Total REHP AOC Allocated	4,264,088		898,330	
Total RPSPP AOC Allocated		391,116		217,490

**Numbers may not add due to rounding

Section 4 - Assets

The Commonwealth contributed funds to the Other Postemployment Benefits Investment Pool (“the Pool”) during the fiscal year ended June 30, 2008. The Pool was established for purposes of advance funding retiree health benefits of current and future retirees. During the fiscal year ended June 30, 2008, the Commonwealth fully funded the REHP ARC; therefore, no REHP OPEB liability was reported as of June 30, 2008. Since then, neither the REHP nor the RPSPP ARC has been fully funded. Policy on advance funding is evaluated annually. No advance funding is currently planned for FY 2012/2013 and FY 2013/2014.

Table 4.1 shows the market value of assets as of June 30, 2012 and May 31, 2013 and compares them to the prior years.

Table 4.1		
Market Value of Assets		
Amounts in (\$millions)		
	REHP	RPSPP
As of June 30, 2010	\$56.32	\$47.68
As of June 30, 2011	\$70.74	\$59.90
As of June 30, 2012	\$71.63	\$60.65
As of May 31, 2013	\$82.06	\$69.48

Section 5 - Actuarial Assumptions

The selection of all actuarial assumptions, in valuations of post-retirement health care plans including the health care cost trend rate, should be guided by Actuarial Standard of Practice No. 6, *Measuring Retiree Group Benefit Obligations*, as revised from time to time by the Actuarial Standards Board. Accordingly, actuarial assumptions should be based on the actual experience of the covered group, to the extent that creditable experience data are available, but should emphasize expected long-term future trends rather than give undue weight to recent past experience. The reasonableness of each actuarial assumption should be considered independently based on its own merits, its consistency with each other assumption, and the combined impact of all assumptions.

The actuarial assumptions used to value the post-retirement medical liabilities can be categorized into three groups: economic assumptions, medical assumptions, and demographic assumptions

Economic Assumptions

The two economic assumptions used in the valuation are the discount rate and the health care cost trend rates. The economic assumptions are used to account for changes in the cost of benefits over time and to discount future benefit payments for the time value of money.

Discount Rate

The Governmental Accounting Standards Board prescribed approach for selecting the discount rate is to examine the expected long-term returns on the assets expected to be used for paying the benefits. Currently, the Commonwealth plans to fund the benefits on a “pay-as-you-go” (PAYG) basis, i.e. using assets from the Short-Term Investment Pool.

Based on the historical performance on the STIP, the compound annualized returns have ranged between 3.43 percent to 5.79 percent over 5-year periods, and over 4.05 percent to 6.41 percent over 10-year periods. The table below shows the historical average over the last 5, 10, 15, 20, and 25 years.

Averaging Period	5-years	10-years	15-years	20-years	25-years
Annual Rate	4.79%	5.10%	3.05%	5.06%	5.53%

Given the consistency of the rates over long time periods, the Commonwealth experience supports a rate in the 4.50 percent to 5.00 percent range. For this valuation we recommend using a rate of 4.75 percent for the June 30, 2012 and June 30, 2013 measurements.

Table 5.1 shows the health care cost trend rates that were used for the actuarial valuation of the REHP Post-Retirement Medical Plan

Table 5.1			
Health Care Cost Trend Rate Assumptions for REHP			
Year	Medicare-Retiree Medical Benefits	Non-Medicare-Retiree Medical Benefits	Pharmacy Benefits
2012	5.70%	6.20%	6.20%
2013	5.70%	6.10%	6.10%
2014	5.70%	6.00%	6.00%
2015	5.90%	5.90%	5.90%
2016	5.80%	5.80%	5.80%
2017	5.70%	5.70%	5.70%
2018	5.70%	5.70%	5.70%
2019	5.70%	5.70%	5.70%
2020	5.70%	5.70%	5.70%
2025	5.60%	5.60%	5.60%
2030	4.80%	4.80%	4.80%
2050	4.50%	4.50%	4.50%
2070	4.20%	4.20%	4.20%
2082+	3.80%	3.80%	3.80%

Note: Short-term Part B Premium trend rates are based on the 2012 Medicare Trustees Report.

Table 5.2 shows the health care cost trend rates that were used for the actuarial valuation of the RPSPP Post-Retirement Medical Plan.

Table 5.2				
Health Care Cost Trend Rate Assumptions for RPSPP				
Year	Medical Benefits	Pharmacy Benefits	Dental Benefits	Part B Premiums
2012	6.20%	6.20%	6.20%	6.00%
2013	6.10%	6.10%	6.10%	0.00%

Table 5.2
Health Care Cost Trend Rate Assumptions for RPSPP

Year	Medical Benefits	Pharmacy Benefits	Dental Benefits	Part B Premiums
2014	6.00%	6.00%	6.00%	9.10%
2015	5.90%	5.90%	5.90%	3.60%
2016	5.80%	5.80%	5.80%	3.30%
2017	5.70%	5.70%	5.70%	4.50%
2018	5.70%	5.70%	5.70%	4.90%
2019	5.70%	5.70%	5.70%	4.80%
2020	5.70%	5.70%	5.70%	5.30%
2025	5.60%	5.60%	5.60%	4.00%
2030	4.80%	4.80%	4.80%	4.00%
2050	4.50%	4.50%	4.50%	4.00%
2070	4.20%	4.20%	4.20%	4.00%
2082+	3.80%	3.80%	3.80%	4.00%

Appendix A contains a chart showing the historical increases in health care premiums from two sources: the Hay Benefits Report and the Federal Employees Health Benefit Plan for the period 1982 through 2011.

Medical Assumptions

A fundamental building block of the actuarial valuation is the current per capita cost of benefits.

For this valuation we obtained 2012 claims data in summary format and used that data, together with the aging factors developed in the prior valuation to develop age-specific per capita claims costs.

Retired Employees Health Program

Table 5.3 shows the per capita 2010 and 2012 claims and shows the growth over the 2-year time period for REHP. Our analysis shows that between 2010 and 2012 the REHP employer primary medical per capita claims grew by 26.2 percent (average of 13.1% per year) and the Medicare Advantage plan per capita premiums grew by 37.8 percent (average of 18.9% per year). The prescription drug per capita claims grew by only 3.7 percent during the period.

Table 5.3 – REHP Claims Growth			
	Medical		Prescription Drugs
	Employer Primary	Medicare Primary	
2010 Claims			
Total	\$212,191,080	\$78,589,550	\$262,179,431
Per Capita	\$5,897	\$1,358	\$2,801
2012 Claims			
Total	\$254,700,231	\$114,650,592	\$274,839,313
Per Capita	\$7,444	\$1,870	\$2,904
Growth	26.2%	37.8%	3.7%

Table 5.4 shows the actual and expected 2012 per capita claims for REHP. This table shows the projected 2012 rates based on the 2010 valuation rates and the valuation trend assumptions and compares the actual 2012 claims experience with the expected costs. Our analysis shows that for the REHP the 2012 per capita claims are higher for medical (both Medicare and Non-Medicare) and lower for prescription drugs than expected.

Table 5.4 – REHP Per Capita Claims Costs			
	Medical		Prescription Drugs
	Employer Primary	Medicare Primary	
Expected 2012 Claims	\$6,339	\$1,548	\$2,969
Actual 2012 Claims	\$7,444	\$1,870	\$2,904
Actual less Expected	\$1,105	\$322	(\$65)
Actual / Expected	17.4%	20.8%	-2.2%

Table 5.5 shows the baseline per capita claims costs that were used in the valuation for REHP for current and future retirees. The post-65 pharmacy claims reflect the expected savings for the EGW Plan beginning on January 1, 2013.

**Table 5.5
REHP
Per Capita Claims Costs in 2012**

Age	Medical		Pharmacy
	Employer Primary	Medicare Primary	
<50	\$3,897	\$4,661	\$1,590
50 - 54	\$5,081	\$4,661	\$1,590
55 - 59	\$6,015	\$4,661	\$1,862
60 - 64	\$7,444	\$4,661	\$1,985
65 - 69	\$9,503	\$1,870	\$2,506
70 - 74	\$11,842	\$1,870	\$2,707
75 - 79	\$14,408	\$1,870	\$2,833
80 - 84	\$17,111	\$1,870	\$2,794
85 - 89	\$19,836	\$1,870	\$2,631
90+	\$22,443	\$1,870	\$2,185

Retired Pennsylvania State Police Program

Separate health care claims costs were developed for RPSPP members. These costs reflect several differences between the benefits and population of the State Police. One key difference is their eligibility for Medicare. State Police enlisted members hired before 1986 were not required to pay the Medicare Hospital Insurance contributions and therefore upon attainment of age 65 are not eligible for Medicare Part A and the RPSPP remains primary for their medical benefits. Accordingly, we developed both non-Medicare-eligible and Medicare-eligible rates for retirees over age 65. For State Police hired after 1986, and other members who enroll in Medicare having earned eligibility through a spouse or other employment, the Commonwealth pays the Part B premium for the Medicare-enrolled retiree. The RPSPP also includes coverage for dental benefits.

Table 5.6 shows the per capita 2010 and 2012 claims and shows the growth over the 2 year time period for RPSPP. Our analysis shows that between 2010 and 2012 the employer primary medical per capita claims grew by 19.0 (average of 9.1 per year) percent and the Medicare primary per capita claims grew by 38.1 percent (average of 17.5 per year). The prescription drug per capita claims grew by 4.9 percent for the closed group (pre-1995) retirees and declined by 1.1 percent for the post-1995 retirees.

Table 5.6 – RPSPP Claims Growth

	Medical		Pharmacy	
	Employer Primary	Medicare Primary	Pre July 1995 Retirees	Post July 1995 Retirees
2010 Claims				
Total	\$29,653,576	\$13,273,831	\$13,940,341	\$9,335,792
Average	\$6,114	\$4,671	\$3,475	\$2,880
2012 Claims				
Total	\$34,345,905	\$20,081,712	\$13,723,044	\$11,482,377
Average	\$7,274	\$6,451	\$3,644	\$2,849
Growth in Claims	19.0%	38.1%	4.9%	-1.1%

Table 5.7 shows the actual and expected 2012 per capita claims for RPSPP. This table shows the projected 2012 rates based on the 2010 valuation rates and the valuation trend assumptions and compares the actual 2012 claims experience with the expected costs. Our analysis shows that for RPSPP the 2012 per capita claims are higher for medical (both Medicare and Employer Primary) and lower for prescription drugs (both pre-1995 and post-1995 retirees) than expected.

Table 5.7 – RPSPP Per Capita Claims Costs

	Medical		Pharmacy	
	Employer Primary	Medicare Primary	Pre July 1995 Retirees	Post July 1995 Retirees
Expected 2012 Claims	\$7,066	\$5,397	\$3,941	\$3,266
Actual 2012 Claims	\$7,274	\$6,451	\$3,644	\$2,849
Actual less Expected	\$208	\$1,054	(\$297)	(\$417)
Actual / Expected	3.0%	19.5%	-7.5%	-12.8%

Table 5.8 shows the baseline per capita claims costs that were used in the valuation of the State Police current and future retirees.

Table 5.8 RPSP Per Capita Claims Costs in 2012						
Age	Medical		Pharmacy		Dental	Part B
	Employer Primary	Medicare Primary	Pre July 1995 Retirees	Post July 1995 Retirees		
<50	\$3,789	\$10,556	\$1,756	\$1,515	\$551	
50 - 54	\$4,949	\$9,588	\$2,461	\$2,123	\$551	
55 - 59	\$5,868	\$8,617	\$2,881	\$2,486	\$551	
60 - 64	\$7,274	\$7,648	\$3,073	\$2,652	\$551	
65 - 69	\$7,982	\$6,680	\$3,392	\$3,354	\$551	\$1,199
70 - 74	\$9,514	\$6,451	\$3,644	\$3,606	\$551	\$1,199
75 - 79	\$11,441	\$7,272	\$3,802	\$3,762	\$551	\$1,199
80 - 84	\$13,381	\$7,732	\$3,753	\$3,712	\$551	\$1,199
85 - 89	\$15,251	\$7,832	\$3,548	\$3,510	\$551	\$1,199
90+	\$17,121	\$8,283	\$2,988	\$2,958	\$551	\$1,199

Effective January 1, 2013, the Commonwealth began offering an Employer Group Waiver Plans (EGWP) to coordinate with the expanded Medicare Part D program to their REHP retiree group. The changes are designed to capture additional subsidies from the Affordable Care Act, which modified the Medicare Part D Plan. The additional savings are due to:

- (a) Capturing the pharmaceutical manufacturer’s discount on approved brand drugs purchased by retirees with drug expenses in excess of initial coverage limit (within “donut hole”); and
- (b) Reinsurance payments that are likely to be received with respect to retirees with very large drug expenses

This new plan design allows the Commonwealth to maximize the amount of subsidy it can receive from CMS through the EGWP contract. As a consequence, the federal subsidies the Commonwealth will receive as an offset to the cost increased substantially. We have used an estimate of \$12 million annual savings starting on January 1, 2013 to offset the retiree liability.

Demographic Assumptions

The demographic assumptions used for valuing the liabilities of the post-retirement medical plan are those used for the actuarial valuation of the State Employees’ Retirement System.

The demographic assumptions include the rate of mortality, the rate of withdrawal, the rate of retirement, and the rate of disability. Ancillary demographic assumptions include the age of female spouses, coverage rates, and participation rates. The complete set of demographic assumptions is included in Appendix B.

Section 6 - Financial Accounting Information

In addition to establishing the Annual Required Contribution (ARC) and Annual OPEB cost (AOC), this report shows the progress toward funding of the plan benefits. This section includes a schedule of the funding progress, which is a statement of disclosure to report the information required by Governmental Accounting Standards Board (GASB) Statement No. 45.

Also included is a schedule of employer contributions. This schedule compares the expected contribution to the plan with the ARC and AOC. Since there is a lag-period between the determination of the ARC and AOC and the determination of the amounts actually funded, the tables show estimated amounts based on the funding policy as of the measurement date.

GASB 45 Disclosures

Table 6.1 shows the schedule of funding progress for the Retired Employees Health Program (REHP) and Table 6.2 shows the schedule of funding progress for the Retired Pennsylvania State Police Program (RPSPP).

Table 6.3 (for the REHP) and Table 6.4 (for the RPSPP) show the projected Annual OPEB Cost for FY 2012/13 and FY 2013/14 and the projected employer contributions. The table also provides historical information. The ratio of the projected employer contributions to the AOC is the percentage of the AOC that is funded.

Table 6.1
Retired Employees Health Program
Schedule of Funding Progress
(dollars in millions)

Fiscal Year Ending June 30	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded Actual Liability (UAAL) (b-a)	Funded Ratio (a/b)	Estimated Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a)/c)
2008	\$60.00	\$12,863.27	\$12,803.27	0.47%	\$3,559	360%
2009	\$47.92	\$13,257.57	\$13,209.65	0.36%	\$4,093	323%
2010	\$56.32	\$13,674.25	\$13,617.93	0.41%	\$3,786	360%
2011	\$70.74	\$12,907.79	\$12,837.05	0.55%	\$3,839	334%
2012	\$71.63	\$12,843.70	\$12,772.07	0.56%	\$4,130	309%
2013	\$82.06*	\$13,234.04	\$13,151.98	0.62%	\$4,264**	308%

* Assets as of May 31, 2013

**Estimated

Table 6.2
Retired Pennsylvania State Police Program
Schedule of Funding Progress
(dollars in millions)

Fiscal Year Ending June 30	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded Actual Liability (UAAL) (b-a)	Funded Ratio (a/b)	Estimated Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a)/c)
2008	\$50.80	\$1,999.50	\$1,948.70	2.61%	\$314	621%
2009	\$40.57	\$2,104.24	\$2,063.67	1.97%	\$337	612%
2010	\$47.68	\$2,209.46	\$2,161.78	2.15%	\$435	497%
2011	\$59.90	\$2,492.28	\$2,432.38	2.40%	\$447	544%
2012	\$60.65	\$3,053.27	\$2,992.62	1.99%	\$379	790%
2013	\$69.48*	\$3,188.19	\$3,118.71	2.18%	\$391**	797%

* Assets as of May 31, 2013

**Estimated

Table 6.3
Retired Employees Health Program
Schedule of Employer Contributions
(dollars in millions)

Fiscal Year Ending June 30	Annual OPEB Contribution	Expected Employer Contribution	Percentage Contributed
2008	\$590.40	\$590.40	100%
2009	\$818.51	\$505.56	62%
2010	\$850.44	\$515.43	61%
2011	\$883.16	\$598.34	68%
2012	\$870.20	\$628.19	72%
2013	\$869.14	\$613.66*	71%

Table 6.4
Retired Pennsylvania State Police Program
Schedule of Employer Contributions
(dollars in millions)

Fiscal Year Ending June 30	Annual OPEB Contribution	Employer Contribution	Percentage Contributed
2008	\$120.29	\$114.79	95%
2009	\$143.39	\$54.57	38%
2010	\$151.73	\$62.02	41%
2011	\$159.45	\$66.35	42%
2012	\$175.24	\$68.78	39%
2013	\$208.55	\$68.38*	33%

*Tables 6.3 and 6.4 show expected employer contributions based on information available at the date the report was prepared. Future events including emerging health care cost experience for retirees and hiring of new employees will affect the expected amounts.

**GASB No. 45 Disclosure
Development of Net OPEB Obligation**

**Table 6.5
Postretirement Medical Benefits REHP**

Actuarial Valuation Date	Annual Required Contribution (a)	Interest on Unfunded ARC (b)	Adjustment of the ARC (c)	Annual OPEB Cost (d) = (a) + (b) + (c)	Actual Contribution (e)	Increase in OPEB obligation (f) = (d) - (e)	Net OPEB liability at end of year (g) = prior year (g) + (f)
7/1/2007	\$590.40	\$0.00	\$0.00	\$590.40	\$590.40	\$0.00	\$0.00
7/1/2008	\$818.51	\$0.00	\$0.00	\$818.51	\$505.56	\$312.95	\$312.95
7/1/2009	\$848.53	\$15.65	(\$13.74)	\$850.44	\$515.43	\$335.00	\$647.95
7/1/2010	\$879.21	\$32.40	(\$28.45)	\$883.16	\$598.34	\$284.82	\$932.78
7/1/2011	\$866.77	\$44.31	(\$40.88)	\$870.20	\$628.19	\$242.01	\$1,174.79
7/1/2012	\$864.83	\$55.80	(\$51.49)	\$869.14	\$613.66*	\$255.48	\$1,430.27
7/1/2013	\$893.07	\$67.94	(\$62.68)	\$898.33	TBD	TBD	TBD

*Estimated

**Numbers might not add due to rounding

Table 6.6
Postretirement Medical Benefits RPSPP

Actuarial Valuation Date	Annual Required Contribution (a)	Interest on Unfunded ARC (b)	Adjustment of the ARC (c)	Annual OPEB Cost (d) = (a) + (b) + (c)	Actual Contribution (e)	Increase in OPEB obligation (f) = (d) - (e)	Net OPEB liability at end of year (g) = prior year (g) + (f)
7/1/2007	\$120.29	\$0.00	\$0.00	\$120.29	\$114.79	\$5.50	\$5.50
7/1/2008	\$143.35	\$0.28	(\$0.24)	\$143.39	\$54.57	\$88.82	\$94.32
7/1/2009	\$151.15	\$4.72	(\$4.14)	\$151.73	\$62.02	\$89.71	\$184.03
7/1/2010	\$158.33	\$9.20	(\$8.08)	\$159.45	\$66.35	\$93.10	\$277.13
7/1/2011	\$174.23	\$13.16	(\$12.15)	\$175.24	\$68.78	\$106.46	\$383.59
7/1/2012	\$207.14	\$18.22	(\$16.81)	\$208.55	\$68.38*	\$140.17	\$523.76
7/1/2013	\$215.56	\$24.88	(\$22.95)	\$217.49	TBD	TBD	TBD

*Estimated

**Numbers might not add due to rounding

Section 7 - Summary of Plan Provisions

Retired Employees Health Program

Employees who retire from the state at any age with 25 years of service and receive an immediate pension are eligible for majority paid coverage under the REHP. In addition, the employees who retire at superannuation age with a minimum of 20 years of service (if retired on or after July 1, 2008), and receive an immediate pension are eligible for majority paid coverage under the REHP. Finally, employees who qualify for a disability retirement are eligible for majority paid coverage under the REHP.

Eligible retirees have various options, depending on (a) their date of retirement and (b) their Medicare status.

Table 7.1

	Non-Medicare Retirees		Medicare-Eligible Retirees	
Retirement date	Prior to 7/1/04	On or after 7/1/04	Prior to 7/1/04	On or after 7/1/04
Medical Plan Options	Basic	Not available	Medicare Supplement & PEBTF Major Medical (not available to most, must meet unique qualifications)	Medicare Supplement & PEBTF Major Medical(not available to most, must meet unique qualifications)
	HMO	HMO		
	PPO	PPO		
		CDHP	Medicare Advantage HMO or PPO	Medicare Advantage HMO or PPO
Pharmacy Plan	Three tier co-pay	Retail 30 day supply: \$10 for Generic, \$18* for Preferred Brand, \$36* for Non Preferred Brand	Part D, Three tier co-pay	Retail 30 day supply: \$10 for Generic, \$18* for Preferred Brand, \$36* for Non Preferred Brand
		Mail order or retail through CVS 90 day supply: \$15 for Generic, \$27* for Preferred Brand, \$54* for Non Preferred Brand		Mail order SilverScript or retail through CVS 90 day supply: \$15 for Generic, \$27* for Preferred Brand, \$54* for Non Preferred Brand
		Retail maintenance through Rite Aid 90 day supply: \$20 for Generic, \$36* for Preferred Brand, \$72* for Non Preferred Brand		Non-preferred retail network 90 day supply: \$20 for Generic, \$36* for Preferred Brand, \$72* for Non Preferred Brand

*Plus cost difference between the brand and generic, if one exists.

Non-Medicare eligible retirees who retired prior to 7/1/04 have three options: Basic, HMO, and PPO. Non-Medicare eligible retirees who retired after or on 7/1/04 also have three options: PPO, HMO, and a Consumer Driven option.

The summaries of the plan provisions described below are those of the HMO Option.

Table 7.2 HMO Option		
	Retiree Cost Sharing	
Benefit	Retired Prior to 7/1/2004	Retired on or after 7/1/2004
Deductible <i>(Applies to all benefits unless otherwise noted)</i>	None	None
OOP Max	None	None
Physician Visits		
PCP	\$15 co-pay	\$15 co-pay
Specialist	\$25 co-pay	\$25 co-pay
Preventive Care		
<i>Adult</i>		
Routine Physical	\$15 co-pay	\$15 co-pay
Annual Routine Gynecological exams	\$25 co-pay	\$25 co-pay
Annual Routine Mammograms	0% coinsurance	0% coinsurance
<i>Pediatric</i>		
Routine Physical	\$15 co-pay	\$15 co-pay
Immunizations	0% coinsurance	0% coinsurance
Emergency Room	\$50 (waived if admitted)	\$50 (waived if admitted)
Hospital Expenses	0% coinsurance semi-private room (private if medically necessary)	0% coinsurance semi-private room (private if medically necessary)
Medical/Surgical Expenses	0% coinsurance	0% coinsurance
SNF	0% coinsurance (180 day max)	0% coinsurance (180 day max)
Home Health	0% coinsurance (60 visits in 90 days)	0% coinsurance (60 visits in 90 days)
Chiropractic Care	\$15 co-pay initial visit only(combined 60 visits/year max)	\$15 co-pay per visit(combined 60 visits/year max)
MH and Substance Abuse	Provided by Optum	Provided by Optum

The summaries of the plan provisions described below are those of the PPO Option.

Table 7.3 PPO Option				
Retiree Cost Sharing				
	Retired Prior to 7/1/2004		Retired on or after 7/1/2004	
Benefit	In Network	Out-of-Network	In Network	Out-of-Network
Deductible <i>(Applies to all benefits unless otherwise noted)</i>	None	\$250 Individual; \$500 family	None	\$400 per person;
OOP Max	None	\$1,000 individual; \$2,000 family	None	\$1,500 individual; \$3,000 family
Physician Visits				
PCP	\$15 co-pay	20% coinsurance	\$15 co-pay	30% coinsurance
Specialist	\$25 co-pay	20% coinsurance	\$25 co-pay	30% coinsurance
Preventive Care				
<i>Adult</i>				
Routine Physical	\$15 co-pay	20% coinsurance	\$15 co-pay	30% coinsurance
Annual Routine Gynecological exams	\$15 PCP/\$25 specialist co-pay	20% coinsurance (OON ded. waived)	\$15 PCP/\$25 specialist co-pay	30% coinsurance (OON ded. waived)
Annual Routine Mammograms	0% coinsurance	20% coinsurance (OON ded. waived)	0% coinsurance	30% coinsurance (OON ded. waived)
<i>Pediatric</i>				
Routine Physical	\$15 co-pay	20% coinsurance	\$15 co-pay	30% coinsurance
Immunizations	0% coinsurance	20% coinsurance (OON ded. waived)	0% coinsurance	30% coinsurance (OON ded. waived)
Emergency Room	\$50 (waived if admitted)	\$50 (waived if admitted)	\$50 (waived if admitted)	\$50 (waived if admitted)
Hospital Expenses	0% coinsurance	20% coinsurance	0% coinsurance	30% coinsurance
Medical/Surgical Expenses	0% coinsurance	20% coinsurance	0% coinsurance	30% coinsurance
SNF	0% coinsurance (240 days)	20% coinsurance (up to 240 days)	0% coinsurance (240 days)	30% coinsurance (up to 240 days)
Home Health	0% coinsurance	20% coinsurance	0% coinsurance	30% coinsurance
Chiropractic Care	\$15 co-pay for first visit only	20% coinsurance	\$15 co-pay for first visit only	30% coinsurance
MH and Substance Abuse	Provided by Optum	Provided by Optum	Provided by Optum	Provided by Optum

The summaries of the plan provisions described below are those of the Consumer Driven Option.

Table 7.4 Consumer Driven Option			
Retiree Cost Sharing			
Benefit	Retired Prior to 7/1/2004	Retired on or after 7/1/2004	
		In Network	Out-of-Network
Deductible <i>(Applies to all benefits unless otherwise noted)</i>	PLAN NOT AVAILABLE	\$1,500 individual; \$3,000 family. The REHP contributes \$1,000 per individual & \$2,000 per family per year into a Health Reimbursement Account (HRA). Therefore, the OOP max (In network) is \$500 per individual or \$1,000 per family per year.	
OOP Max		\$500 Individual (after HRA); \$1,000 family (after HRA)	\$3,500 Individual (after HRA); \$7,000 family (after HRA)
Physician Visits			
PCP		0% coinsurance	30% coinsurance
Specialist		0% coinsurance	30% coinsurance
Preventive Care			
<i>Adult</i>			
Routine Physical			
Annual Routine Gynecological exams		Covered up to \$500 a year (\$1,000 for family)	Not Covered
Annual Routine Mammograms			
<i>Pediatric</i>			
Routine Physical			
Immunizations			
Emergency Room		0% coinsurance	30% coinsurance
Hospital Expenses		0% coinsurance	30% coinsurance
Medical/Surgical Expenses		0% coinsurance	30% coinsurance
SNF		0% coinsurance (240 day max)	30% coinsurance (240 day max)
Home Health		0% coinsurance	30% coinsurance
Chiropractic Care		0% coinsurance	30% coinsurance
MH and Substance Abuse		Provided by Optum	Provided by Optum

The summary of the plan provisions described below is that of the Basic Option.

Table 7.5 Basic Option		
Retiree Cost Sharing		
Benefit	Retired Prior to 7/1/2004	Retired on or after 7/1/2004
Deductible <i>(Applies to all benefits unless otherwise noted)</i>	PEBTF Major Medical \$100 per person, max 3 per family; 20% of next \$1,900 and 0% thereafter	PLAN NOT AVAILABLE
OOP Max	PEBTF Major Medical \$380 per person plus deductible and any charges in excess of the UCR	
Physician Visits		
Primary Care Physician	Responsible for charges; must submit to PEBTF Major Medical	
Specialist	Responsible for charges; must submit to PEBTF Major Medical	
Preventive Care		
<i>Adult</i>		
Routine Physical	Not covered; pay 100% of cost	
Annual Routine Gynecological exams	0% coinsurance	
Annual Routine Mammograms	0% coinsurance	
<i>Pediatric</i>		
Routine Physical	0% coinsurance	
Immunizations	0% coinsurance	
Emergency Room	0% coinsurance if medical emergency and treated within 72 hours	
Hospital Expenses	0% coinsurance semi-private room (private if medically necessary)	
Medical/Surgical Expenses	0% coinsurance	
SNF	0% coinsurance (120 day max)	
Home Health	0% coinsurance (120 visits in 90 days)	
Chiropractic Care	0% coinsurance	
MH and Substance Abuse	Provided by Optum	

Retiree Contributions (REHP only)

For employees who retired before July 1, 2005 the Commonwealth pays 100% of the cost. Commonwealth employees who retire on or after July 1, 2005 are required to pay retiree contributions as a condition of receiving retiree medical coverage. For employees who retired after June 30, 2005 and before July 1, 2007 the retiree contribution is set at 1 percent of the employee's final annual salary. Most Commonwealth employees who retire on or after July 1, 2007 but before July 1, 2011 are currently required to pay retiree contributions of 3 percent of either their final annual gross salary or final average salary, whichever is less. Most employees who retire on or after July 1, 2011 are currently required to pay retiree contributions of 3 percent of their final average salary. Upon enrollment in Medicare, Commonwealth employees who are currently paying 3 percent will pay retiree contributions of 1.5 percent of either their final annual gross salary or final average salary, whichever applies.

Surviving spouses and dependents of deceased retirees may continue to participate in the plan if they pay contributions at a rate designed to fund the full cost of the coverage.

Retired Pennsylvania State Police Program

Table 7.6 shows a summary of the plan provisions of the RPSPP. The Commonwealth pays 100 percent of the cost for RPSPP retirees as well as the spouses and dependents of RPSPP retirees while the retiree is alive.

Table 7.6 RPSPP Plan Option		
Retiree Cost Sharing		
	PPO Option	
Benefit	In Network	Out Network
Deductible <i>Per Benefit Period</i>	None	\$250 Individual; \$750 Family Aggregate
OOP Max <i>Includes Coinsurance</i>	Not Applicable	\$1,500 Individual; \$3,000 Family Aggregate
Office Visits		
PCP	100% PRC after \$15 co-pay	80% PRC after deductible
Specialist	100% PRC after \$25 co-pay	80% PRC after deductible
Preventive Care <i>Adult</i>		
Routine Physical	100% PRC after \$15 co-pay	80% PRC after deductible
Routine Gynecological exams & Pap Test Screening	100% PRC	80% PRC no deductible / lifetime maximum
Mammograms	100% PRC	80% PRC after deductible

**Table 7.6
RPSPP Plan Option**

Retiree Cost Sharing		
	PPO Option	
Benefit	In Network	Out Network
<i>Pediatric</i>		
Routine Physical Exam	100% PRC after \$15 co-pay	80% PRC after deductible
Immunizations	100% PRC	80% PRC no deductible / lifetime maximum
Emergency Room Services <i>Facility Services</i>	100% PRC after \$50 co-pay (waived if admitted)	100% PRC after \$50 co-pay (waived if admitted)
Hospital Expenses <i>Inpatient & Outpatient</i>	100% PRC	80% PRC after deductible
	Combined Limit: 365 days, 2 pint blood deductible per benefit period	
Surgical Expenses <i>Includes Assistant Surgery, Anesthesia, Sterilization & Reversal Procedures, & Neonatal Circumcision</i>	100% PRC	80% PRC after deductible
SNF Care	100% PRC	80% PRC after deductible
	Unlimited days per benefit period	
Home Health <i>Excludes Respite Care</i>	100% PRC	80% PRC after deductible
	Unlimited visits per benefit period	
Spinal Manipulations	100% PRC after \$15 co-pay	80% PRC after deductible
	Unlimited visits per benefit period	
Mental Health – Inpatient <i>Includes Partial Hospitalization (2 for 1 trade)</i>	100% PRC	80% PRC after deductible
Mental Health – Outpatient	100% PRC after \$25 co-pay	50% PRC after deductible
Substance Abuse – Detoxification	100% PRC	80% PRC after deductible
Substance Abuse – Inpatient Rehabilitation <i>Includes Partial Hospitalization (2 for 1 trade)</i>	100% PRC	80% PRC after deductible
Substance Abuse – Outpatient	100% PRC after \$25 co-pay	80% PRC after deductible

**Table 7.7
RPSPP Rx Drug Benefit Program**

	Retired 7/1/73 through 6/30/95	Retired 7/1/95 through 4/20/05	Retired 4/21/05 through 6/30/07 (2-Tier Plan)	Retired on or after 7/1/2007 (3-Tier Plan)
Generic	\$7.00 Retail (up to 30-day supply) \$5.00 Mail Order (31 days up to a 100-day maintenance supply)	\$1.00 Retail (34-day supply or 100 unit dose) \$1.00 Mail Order (Up to 6-month supply)	\$5.00 Retail (30-day supply) \$10.00 Mail Order (6-month supply)	\$5.00 Retail (30-day supply) \$10.00 Mail Order (180-day supply)
Preferred brand	Same as above	Same as above	\$10.00 Retail (30-day supply) \$20.00 Mail Order (6-month supply)	\$10.00 Retail (30-day supply) \$20.00 Mail Order (180-day supply)
Non-Preferred brand	Same as above	Same as above	N/A	\$15.00 Retail (30-day supply) \$30.00 Mail Order (180-day supply)

**Table 7.8
RPSPP Indemnity Plan (Major Medical)**

Retiree Cost Sharing				
	Retired 7/1/73 through 6/30/95	Retired 7/1/95 through 4/20/05	Retired 4/21/05 through 6/30/07 (2-Tier Plan)	Retired on or after 7/1/2007 (3-Tier Plan)
Deductible <i>Per Benefit Period</i>	\$100 Individual \$300 Family Fourth Quarter Deductible Carryover Applies	\$100 Individual \$300 Family	\$100 Individual \$300 Family	\$250 Individual \$750 Family
OOP Max <i>Includes Coinsurance</i>	\$380 Individual after deductible	\$380 Individual after deductible	\$380 Individual after deductible	\$380 Individual after deductible
Office Visits				
PCP	80% PRC after deductible	80% PRC after deductible	80% PRC after deductible	80% PRC after deductible
Specialist	80% PRC after deductible	80% PRC after deductible	80% PRC after deductible	80% PRC after deductible
Preventive Care				
<i>Adult</i>				
Routine Physical	Not Covered	Not covered	Not covered	Not covered
Routine Gynecological exams & Pap Test	80% PRC no deductible	80% PRC no deductible	80% PRC no deductible	80% PRC no deductible

**Table 7.8
RPSPP Indemnity Plan (Major Medical)**

Screening				
Mammograms	80% PRC no deductible	80% PRC no deductible	80% PRC no deductible	80% PRC no deductible
<i>Pediatric</i>				
Routine Physical Exam	Not Covered	Not covered	Not covered	Not covered
Immunizations	100% PRC	80% PRC no deductible	80% PRC no deductible	80% PRC no deductible
Emergency Room Services <i>Facility Services</i>	80% PRC after deductible	80% PRC after deductible	80% PRC after deductible	80% PRC after deductible
Hospital Expenses <i>Inpatient & Outpatient</i>	80% PRC after deductible	80% PRC after deductible	80% PRC after deductible	80% PRC after deductible
Surgical Expenses <i>Includes Assistant Surgery, Anesthesia, Sterilization & Reversal Procedures, & Neonatal Circumcision</i>	80% PRC after deductible	80% PRC after deductible	80% PRC after deductible	80% PRC after deductible
SNF Care	80% PRC after deductible	80% PRC after deductible	80% PRC after deductible	80% PRC after deductible
Home Health <i>Excludes Respite Care</i>	80% PRC after deductible	80% PRC after deductible	80% PRC after deductible	80% PRC after deductible
Spinal Manipulations	80% PRC after deductible	80% PRC after deductible	80% PRC after deductible	80% PRC after deductible
Mental Health – Inpatient <i>Includes Partial Hospitalization (2 for 1 trade)</i>	80% PRC after deductible	80% PRC after deductible	80% PRC after deductible	80% PRC after deductible
Mental Health – Outpatient	80% after deductible	80% PRC after deductible	80% PRC after deductible	80% PRC after deductible
Substance Abuse – Detoxification	80% PRC after deductible	80% PRC after deductible	80% PRC after deductible	80% PRC after deductible
Substance Abuse – Inpatient Rehabilitation <i>Includes Partial Hospitalization (2 for 1 trade)</i>	80% PRC after deductible	80% PRC after deductible	80% PRC after deductible	80% PRC after deductible
Substance Abuse – Outpatient	80% PRC after deductible	80% PRC after deductible	80% PRC after deductible	80% PRC after deductible

**Table 7.8a
RPSPP Indemnity Plan (Facility Program)**

Retiree Cost Sharing				
	Retired 7/1/73 through 6/30/95	Retired 7/1/95 through 4/20/05	Retired 4/21/05 through 6/30/07 (2-Tier Plan)	Retired on or after 7/1/2007 (3-Tier Plan)
Preventive Care				
<i>Adult</i>				
Routine Physical	Not Covered	Not Covered	Not covered	Not covered
Routine Gynecological exams & Pap Test Screening	100% PRC	100% PRC	100% PRC	100% PRC
Mammograms	100% PRC	100% PRC	100% PRC	100% PRC
<i>Pediatric</i>				
Routine Physical Exam	Not Covered	Not Covered	Not covered	Not covered
Immunizations	100% PRC	100% PRC	100% PRC	100% PRC
Emergency Room Services Facility Services	100% PRC	100% PRC	100% PRC	100% PRC
Hospital Expenses Inpatient & Outpatient	100% PRC	100% PRC	100% PRC	100% PRC
Surgical Expenses <i>Includes Assistant Surgery, Anesthesia, Sterilization & Reversal Procedures, & Neonatal Circumcision</i>	100% PRC	100% PRC	100% PRC	80% PRC after deductible
SNF Care	Not covered under Facility Program	Not covered under Facility Program	Not covered under Facility Program	80% PRC after deductible
Home Health <i>Excludes Respite Care</i>	100% PRC 60 Home health visits in a 90 day period	100% PRC 60 Home health visits in a 90 day period	100% PRC 60 Home health visits in a 90 day period	100% PRC 60 Home health visits in a 90 day period
Not covered under Facility Program Spinal Manipulations	Not covered under Facility Program	Not covered under Facility Program	Not covered under Facility Program	Not covered under Facility Program

**Table 7.8a
RPSPP Indemnity Plan (Facility Program)**

Retiree Cost Sharing				
Mental Health – Inpatient <i>Includes Partial Hospitalization (2 for 1 trade)</i>	100% PRC	100% PRC	100% PRC	100% PRC
Mental Health – Outpatient	Not Covered	Not Covered	Not Covered	Not Covered
Substance Abuse – Detoxification	100% PRC	100% PRC	100% PRC	100% PRC
Substance Abuse – Inpatient Rehabilitation <i>Includes Partial Hospitalization (2 for 1 trade)</i>	100% PRC	100% PRC	100% PRC	100% PRC
Substance Abuse – Outpatient	100% PRC	100% PRC	100% PRC	100% PRC

**Table 7.8b
RPSPP Indemnity Plan (Professional Program)**

Retiree Cost Sharing				
	Retired 7/1/73 through 6/30/95	Retired 7/1/95 through 4/20/05	Retired 4/21/05 through 6/30/07 (2-Tier Plan)	Retired on or after 7/1/2007 (3-Tier Plan)
Preventive Care				
<i>Adult</i>				
Routine Physical	Not Covered	Not Covered	Not Covered	Not Covered
Routine Gynecological exams & Pap Test Screening	100% PRC	100% PRC	100% PRC	100% PRC
Mammograms	100% PRC	100% PRC	100% PRC	100% PRC
<i>Pediatric</i>				
Routine Physical Exam	Not Covered	Not covered	Not covered	Not covered
Immunizations	100% PRC	100% PRC	100% PRC	100% PRC
Hospital Expenses	Not covered	Not covered	Not covered	Not covered under

**Table 7.8b
RPSPP Indemnity Plan (Professional Program)**

Retiree Cost Sharing				
<i>Inpatient & Outpatient</i>	under Professional Program	under Professional Program	under Professional Program	Professional Program
<i>Surgical Expenses</i>	100% PRC	100% PRC	100% PRC	100% PRC
SNF Care	100% PRC	100% PRC	100% PRC	100% PRC
Home Health <i>Excludes Respite Care</i>	Not covered under Professional Program	Not covered under Professional Program	Not covered under Professional Program	Not covered under Professional Program
Spinal Manipulations	Not covered under Professional Program	Not covered under Professional Program	Not covered under Professional Program	Not covered under Professional Program
Mental Health – Inpatient	Not covered under Professional Program	100% PRC	100% PRC	100% PRC
Mental Health – Outpatient	Not covered under Professional Program	Not covered under Professional Program	Not covered under Professional Program	Not covered under Professional Program
Substance Abuse – Detoxification	100% PRC	100% PRC	Not Covered	100% PRC
Substance Abuse – Inpatient Rehabilitation	100% PRC	100% PRC	100% PRC	100% PRC
Substance Abuse – Outpatient	Not covered under Professional Program	Not covered under Professional Program	100% PRC	Not covered under Professional Program

Section 8 - Participant Data

The following tables show the current retired participants, and the potential participants who are currently active.

Table 8.1 Current Retired Participants						
Age Group	Medicare Eligible		Non Medicare Eligible		Total	
	REHP	RPSPP	REHP	RPSPP	REHP	RPSPP
<50	307	4	457	371	764	375
50-54	443	0	1,240	546	1,683	546
55-59	1,026	1	4,347	382	5,373	383
60-64	1,879	5	11,155	364	13,034	369
65-69	12,325	778	1,048	445	13,373	1,223
70-74	9,071	570	3	177	9,074	747
75-79	6,529	215	14	90	6,543	305
80+	12,532	269	32	82	12,564	351
Total	44,112	1,842	18,296	2,457	62,408	4,299

Table 8.2 Active Participants						
Age Group	Females		Males		Total	
	REHP	RPSPP	REHP	RPSPP	REHP	RPSPP
<20	1	0	2	0	3	0
20-24	471	2	438	19	909	21
25-29	2,209	37	2,822	400	5,031	437
30-34	3,276	47	4,028	531	7,304	578
35-39	3,449	38	4,442	521	7,891	559
40-44	4,508	48	6,242	1,281	10,750	1,329
45-49	5,360	29	6,959	1,060	12,319	1,089
50-54	6,804	8	7,611	204	14,415	212
55-59	6,778	0	7,047	25	13,825	25
60-64	3,329	0	4,164	0	7,493	0
65+	879	0	1,461	1	2,340	1
Total	37,064	209	45,216	4,042	82,280	4,251

Data on employees and retirees who are currently not participating were not included in this analysis.

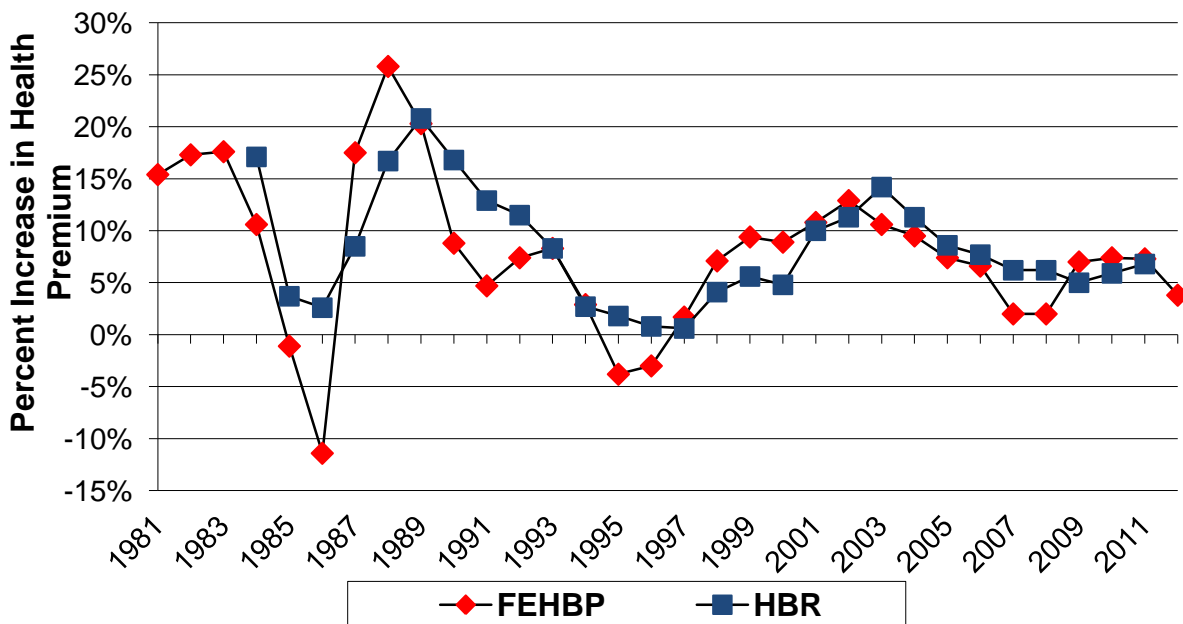
Table 8.3 shows the comparison of the retired participants used to develop the results in the current valuation to the retired participants in the prior valuation. Table 8.4 shows the same comparison for active participants. These tables show that the composition of the plan participants is stable, with a slightly lower active participant count and small increase in the retired participant count.

Table 8.3 Retired Participants Comparison						
Age Group	Medicare Eligible		Non Medicare Eligible		Total	
	REHP	RPSPP	REHP	RPSPP	REHP	RPSPP
Current Valuation	44,112	1,842	18,296	2,457	62,408	4,299
Prior Valuation	39,349	1,488	20,065	2,447	59,414	3,935

Table 8.4 Active Participants Comparison						
Age Group	Females		Males		Total	
	REHP	RPSPP	REHP	RPSPP	REHP	RPSPP
Current Valuation	37,064	209	45,216	4,042	82,280	4,251
Prior Valuation	37,223	206	45,074	4,150	82,297	4,356

Appendix A - Hay Benefits Report Survey and Federal Employees Health Benefits Program Medical Premium Increases

CHART 1
HBR & FEHBP MEDICAL PREMIUM INCREASES
SELECTED CALENDAR YEARS FROM 1981 TO 2012



The above chart shows the annual percentage change in the premiums for the Federal Employees Health Benefit Program (FEHBP) as well as the annual change in the average premiums among the Hay Benefits Report participants. The chart shows the cyclical nature of annual premium rate increases (and decreases).

Starting in 2003 we saw a gradual decline in premium rate increases, but the rate of increase has risen in recent years. The FEHBP premium appears to be a leading indicator of the more broad-based premium changes reflected in the HBR.

Appendix B - Actuarial Assumptions

The complete set of actuarial assumptions for the post-retirement medical plan comprises three types of assumptions:

- Demographic assumptions
- Economic assumptions
- Healthcare assumptions

The demographic assumptions used are the same ones as are used in the State Employees Retirement System (SERS) actuarial valuation. As the timing of an employee's decision as to when to retire is driven primarily on their financial security, the use of consistent assumptions ensures any changes made in the retirement system assumptions are reflected in both the annuitant costs and cost of their retiree medical coverage.

The demographic assumptions used were based on a review of experience under SERS from 2006 through 2010. This section contains an extract of the full set of rates used in the valuation. The full set of rates is in the Seventeenth Investigation of Actuarial Experience of the State Employees' Retirement System of the Commonwealth of Pennsylvania; December 2010; which can be obtained from SERS. The rates are the probabilities that an event will occur in the year after the valuation and are all assumed to occur at the beginning of the year. For instance, the male retirement rate of 25.0 percent at age 60 means that 250 of every 1,000 employees age 60 and who are eligible for full benefits are expected to retire at the date of the valuation.

Demographic Assumptions

Pre Retirement Mortality and Disability:

Representative Rates of Separation Due to Death and Disability				
Age	Death		Disability	
	Male	Female	Male	Female
20	0.04%	0.02%	N/A	N/A
25	0.04	0.02	0.02%	0.04%
30	0.05	0.02	0.07	0.09
35	0.06	0.03	0.12	0.16
40	0.08	0.04	0.19	0.21
45	0.12	0.06	0.33	0.33
50	0.22	0.09	0.46	0.50
55	0.27	0.14	0.60	0.63
60	0.32	0.24	N/A	N/A

Withdrawal Rate:

For General Employees

Representative Rates of Separation Due to Withdrawal								
Age	Male				Female			
	Years of Service				Years of Service			
	0	5	9	14	0	5	9	14
20	20.7%	N/A	N/A	N/A	22.4%	N/A	N/A	N/A
25	16.2	0.8%	0.8%	N/A	20.5	2.7%	1.9%	N/A
30	13.9	0.8	0.6	0.6%	17.9	2.4	1.7	1.8%
35	13.6	0.7	0.4	0.4	12.8	1.9	1.2	1.3
40	13.0	0.5	0.4	0.4	10.0	1.9	0.7	0.5
45	12.1	0.5	0.2	0.2	9.8	1.8	0.7	0.5
50	11.3	0.5	0.2	0.2	9.8	1.8	0.4	0.5
55	11.3	0.6	0.6	0.6	9.8	1.5	1.2	1.2

For Special Employees

Rates of Separation Due to Withdrawal For Special Benefit Classes if Different from General Employee Rates	
Years of Service	State Police/ Hazardous Duty
0	15.0%
1	5.0
2	3.0
3	2.5
4	1.5
5	0.9
6	0.7
7	0.6
8	0.4
9	0.3
10+	0.2

Retirement Rate:

Early Retirement Rates

Representative Rates of Separation for Eligibility for Reduced Benefits				
Age	5 – 14 Years of Credited Service		15 or More Years of Credited Service	
	Male	Female	Male	Female
25	1.0%	1.0%	N/A	N/A
30	1.5	1.5	N/A	N/A
35	1.5	1.5	1.5%	1.5%
40	1.0	1.0	1.5	1.5
45	1.0	1.0	1.5	1.5
50	1.0	1.0	2.0	2.0
55	1.0	1.0	5.5	5.5

Assumptions for General Employees while Active Members

Normal Retirement Rate

(25 years of service under age 60; 3 years of service over age 60)

On June 30, 2008, the minimum service for eligibility for subsidized health benefits increased from 15 to 20 years.

Representative Rates of Separation for Eligibility for Full Unreduced Benefits		
Age	Male	Female
53	25.0	23.0
54	26.0	23.0
55	27.0	23.0
56	28.0	23.0
57 - 59	30.0	23.0
60	25.0	25.0
61	20.0	20.0
62	25.0	25.0
63 - 64	20.0	20.0
65	25.0	25.0
66 - 79	20.0	20.0
80	100.0%	100.0%

Special benefit Class other than General Employees

Normal Retirement Rates

Representative Rates of Separation Due to Retirement other than State Police with 19 or More Years of Service	
Age	State Police/ Hazardous Duty
50	7.0%
55	7.0
60	12.0
65	25.0
70	25.0
75	25.0
80	100.0

Normal Retirement Rate for police with more than 19 years of service

Rates of Separation due to Retirement for State Police with 19* or More Years of Service			
Years of Service	Rate	Years of Service	Rate
19*-23	5.0%	31	20.0%
24*	15.0	32 – 34	40.0
25	50.0	35 – 39	50.0
26-29	20.0	40+	100.0
30	30.0		

* State Police with 19 and 24 years of service at the beginning of the year are assumed to retire at the point they reach 20 and 25 years respectively during the year and to receive the Fraternal Order of Police (FOP) award.

Post Retirement Mortality:

Non-disabled Retirees, Beneficiaries and Survivors: The RP-2000 Healthy Annuitant Mortality Table projected to 2008 and updated to reflect actual SERS experience through 2010. The table includes a margin for future improvement in life expectancy.

Disability Retirees: The RP-2000 Disabled Retiree Mortality Table projected to 2008 and updated to reflect actual SERS experience through 2010. The table includes a margin for future improvement in life expectancy.

Spouse Age Difference: Females are assumed to be 2 years younger than males.

Years of Service Purchased by Eligible Members

Service	Number of Years Purchased
0	0.4
1	0.3
2	0.2
3	0.1
4+	0.0

Economic Assumptions

Interest Rate: 4.75 percent compounded annually. The assumed interest rate is the investment return less investment and administrative expenses.

Career Salary Increases

The career salary scale shown on the following table includes average increases in the employee salary due to promotions and longevity growth. The average career salary growth is 3.8 percent per year. In addition, it is assumed that the salary schedules will increase by 3.3 percent a year. The scale on the following table does not include the assumed 3.3 percent general salary increase.

Assumed future salary increases were modified with respect to Class AA and Class A employees (other than members of the judiciary, legislators and select others) who are subject to the age 60/35 years of service superannuation requirements, to reflect negotiated increases applicable to such employees through June 30, 2007, as summarized below:

Career Salary Scale for Members			
Completed Years of Service	Annual Increase	Completed Years of Service	Annual Increase
1	8.00%	16	2.50%
2	6.00%	17	2.40%
3	4.50%	18	2.30%
4	4.00%	19	2.20%
5	3.75%	20	2.10%
6	3.50%	21	2.00%
7	3.25%	22	1.90%
8	3.20%	23	1.80%
9	3.15%	24	1.70%
10	3.10%	25	1.60%
11	3.00%	26	1.50%
12	2.90%	27	1.40%
13	2.80%	28	1.30%
14	2.70%	29	1.25%
15	2.60%	30+	1.25%

Healthcare Assumptions

Health Care Trend Rates

Health Care Cost Trend Rate Assumptions for REHP			
Year	Medicare-Retiree Medical Benefits	Non-Medicare-Retiree Medical Benefits	Pharmacy Benefits
2012	5.70%	6.20%	6.20%
2013	5.70%	6.10%	6.10%
2014	5.70%	6.00%	6.00%
2015	5.90%	5.90%	5.90%
2016	5.80%	5.80%	5.80%
2017	5.70%	5.70%	5.70%
2018	5.70%	5.70%	5.70%
2019	5.70%	5.70%	5.70%
2020	5.70%	5.70%	5.70%
2025	5.60%	5.60%	5.60%
2030	4.80%	4.80%	4.80%
2050	4.50%	4.50%	4.50%
2070	4.20%	4.20%	4.20%
2082+	3.80%	3.80%	3.80%

Health Care Cost Trend Rate Assumptions for RPSPP				
Year	Medical Benefits	Pharmacy Benefits	Dental Benefits	Part B Premiums
2012	6.20%	6.20%	6.20%	6.00%
2013	6.10%	6.10%	6.10%	0.00%
2014	6.00%	6.00%	6.00%	9.10%
2015	5.90%	5.90%	5.90%	3.60%
2016	5.80%	5.80%	5.80%	3.30%
2017	5.70%	5.70%	5.70%	4.50%
2018	5.70%	5.70%	5.70%	4.90%
2019	5.70%	5.70%	5.70%	4.80%
2020	5.70%	5.70%	5.70%	5.30%
2025	5.60%	5.60%	5.60%	4.00%
2030	4.80%	4.80%	4.80%	4.00%
2050	4.50%	4.50%	4.50%	4.00%
2070	4.20%	4.20%	4.20%	4.00%
2082+	3.80%	3.80%	3.80%	4.00%

Per Capita Claims Cost Assumption:

RPSPP						
Per Capita Claims Costs in 2012						
Age	Medical		Pharmacy		Dental	Part B
	Employer Primary	Medicare Primary	Pre July 1995 Retirees	Post July 1995 Retirees		
<50	\$3,789	\$10,556	\$1,756	\$1,515	\$551	
50-54	\$4,949	\$9,588	\$2,461	\$2,123	\$551	
55-59	\$5,868	\$8,617	\$2,881	\$2,486	\$551	
60-64	\$7,274	\$7,648	\$3,073	\$2,652	\$551	
65-69	\$7,982	\$6,680	\$3,392	\$3,354	\$551	\$1,199
70-74	\$9,514	\$6,451	\$3,644	\$3,606	\$551	\$1,199
75-79	\$11,441	\$7,272	\$3,802	\$3,762	\$551	\$1,199
80-84	\$13,381	\$7,732	\$3,753	\$3,712	\$551	\$1,199
85-89	\$15,251	\$7,832	\$3,548	\$3,510	\$551	\$1,199
90+	\$17,121	\$8,283	\$2,988	\$2,958	\$551	\$1,199

REHP			
Per Capita Claims Costs in 2012			
	Medical		
Age	Employer Primary	Medicare Primary	Pharmacy
<50	\$3,897	\$4,661	\$1,590
50 - 54	\$5,081	\$4,661	\$1,590
55 - 59	\$6,015	\$4,661	\$1,862
60 - 64	\$7,444	\$4,661	\$1,985
65 - 69	\$9,503	\$1,870	\$2,703
70 - 74	\$11,842	\$1,870	\$2,904
75 - 79	\$14,408	\$1,870	\$3,031
80 - 84	\$17,111	\$1,870	\$2,991
85 - 89	\$19,836	\$1,870	\$2,828
90+	\$22,443	\$1,870	\$2,383

Ancillary Demographic Assumptions

Participation Rates

The active plan participants valued are those employees currently enrolled in the PEBTF health plan. We have therefore assumed the post-retirement participation rate is 100 percent.

Coverage Level Election Rates

The table below shows the percentage of retirees by coverage level.

Plan Coverage Levels

Plan	Percent Electing Single Coverage	Percent Electing Retiree & Spouse or Other Dependent Coverage
REHP	45%	55%
RPSPP	15%	85%