State of Utah Employee Other Postemployment Benefit Plan

December 31, 2012 Actuarial Valuation
GASB Statements No. 43 and 45

Hay Group, Inc.
5001 Spring Valley Road
Suite 800 West
Dallas, TX 75244

Robert E. Russell
ASA, EA, MAAA, FCA

HayGroup®

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1. Executive Summary

The State of Utah (the State) sponsors the State Employee Other Postemployment Benefit Plan (State Employee OPEB Plan) in which retirees participate in health insurance and life insurance benefits. Eligible retirees and their dependents may continue health care coverage through the State plan upon retirement.

The updated calculations in this GASB 43/45 report were made as of December 31, 2012 using census data which was provided by the State and health care premium information and plan provisions in effect as of the date of the 2012 valuation.

The ending Net OPEB Obligation/(Asset) was ($6,046,766) as of June 30, 2013.

GASB Accounting Standard

The Governmental Accounting Standards Board in 2004 finalized an accounting standard (GASB 45) Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions (OPEB). This standard requires the State to account for these benefits on an accrual basis. A brief description of the GASB accounting standard can be found in Section 2. The purpose of this report is to provide the State with the Actuarial Accrued Liability and the accrual costs that the State will book as the Annual OPEB Cost for the fiscal years beginning in 2013 and 2014.

Amortization Periods

The GASB standard also allows a choice of amortization periods, with a maximum amortization period of 30 years. The results are presented using a 20-year open amortization period for the Unfunded Actuarial Accrued Liability; the prior valuation in 2010 used a 25-year open amortization period.

Health Care Trend Rates

The accounting standard requires employers to anticipate future health care costs by adjusting today's premiums with projected health care trend rates. Health care costs 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, so to provide the State with an indication of the likely cost, we have determined the liability using a best estimate set of health care trend rates over time.

Year	Pre-Medicare Trend	Medicare Trend	Administrative Expenses Trend
2012	8.5%	6.9%	3.0%
2013	8.0%	6.6%	3.0%
2014	7.5%	6.3%	3.0%
2015	7.0%	5.9%	3.0%
2016	6.5%	5.6%	3.0%
2017	6.0%	5.2%	3.0%
2018	5.5%	4.9%	3.0%
2019 +	4.5%	4.5%	3.0%

Funding

The State established an irrevocable retiree health trust fund in 2007 to begin advance funding the benefits. A description of the proposed funding policy and source of funds is provided in Section 4.

Key Valuation Results

We have measured the post-employment medical liabilities for the retirees currently covered by the post-employment health plans and for active employees covered under the State Employees' Other Postemployment Benefit Plan as of December 31, 2012. The liabilities were calculated using a discount rate of 4.5 percent.

In Table 1.1 we have shown three measures of the liability: the present value of future benefits, the actuarial accrued liability, and the normal cost. 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 in the fiscal year. The table also shows the market value of assets and the unfunded actuarial accrued liability.

The present value of future benefits, actuarial accrued liability, and normal cost has decreased significantly since the prior valuation. The key reasons for the decrease are:

- Decrease in number of active employees who were hired prior to 2006;
- Decrease in average Program I balances for remaining active employees;

- Favorable medical claims experience and supplemental premium costs used in the development of assumed baseline per capita claims costs;
- Decrease in the starting healthcare trend assumptions;

The complete valuation results are shown Section 3.

Table 1.1 shows the valuation results for the current and prior valuations.

Table 1.1 Postemployment Benefit Valuation Results State of Utah State Employees		
	As of December 31, 2010	**As of December 31, 2012**
Assumptions		
Discount rate	**4.50%**	**4.50%**
Rate of Inflation included in discount rate	**2.50%**	**2.50%**
Healthcare cost trend rates:		
Medical/Rx Pre-Medicare Trend - Current Yr	**9.50%**	**8.50%**
Medical/Rx Medicare Trend	**7.50%**	**6.90%**
Administrative trend rate	**3.00%**	**3.00%**
Ultimate trend rate	**4.50%**	**4.50%**
Year Ultimate trend rate is reached	**2019**	**2019**
Valuation Results		
1 Present Value of Future Benefits	**$566,041,910**	**$492,608,617**
2 Actuarial Accrued Liability (AAL)	**$481,392,530**	**$408,661,169**
3 Assets as of Valuation Date	**$106,604,713**	**$150,107,498**
4 Unfunded Actuarial Accrued Liability (UAAL)	**$374,787,817**	**$258,553,671**
5 AAL Funded Status as of Valuation Date	**22%**	**37%**
6 Normal Cost as of Valuation Date (beginning of year)	**$11,787,856**	**$10,018,164**

Annual Required Contribution

The Annual OPEB Cost is the sum of four parts:

(i) the Normal Cost with interest to end of year
(ii) the Amortization payment on the Unfunded Actuarial Accrued Liability,
(iii) interest on the Net OPEB Obligation/(Asset) if any, and
(iv) an adjustment to the ARC to prevent double accrual of principal payments on the unfunded Actuarial Accrued Liability

For an organization that fully funds the OPEB Cost each year, the OPEB Cost is simply the ARC, which is the sum of (i) and (ii).

The State has decided to amortize the unfunded actuarial accrued liability over 20 years as a level dollar amount and to use an open amortization method.

Table 1.2 shows the derivation of the Annual Required Contribution and the Annual OPEB Cost for the current and prior valuations.

Table 1.2
Postemployment Benefit Valuation Results
State of Utah State Employees

		Fiscal Year Ending 6/30/13	Fiscal Year Ending 6/30/14
1	Normal Cost	**$12,318,310**	**$10,468,981**
2	Amortization Cost	**$25,275,326**	**$19,873,457**
3	**Annual Required Contribution (ARC)**	**$37,593,636**	**$30,342,438**
4	Interest on Net OPEB Obligation NOO/(NOA)	**($256,458)**	**($272,104)**
5	ARC adjustment	**$384,293**	**$464,778**
6	**Annual OPEB Cost**	**$37,721,471**	**$30,535,112**

Table 1.3 shows the development of the Net OPEB Liability/(Asset). The Net OPEB Liability is the excess of the Annual Required Contribution over the amount funded by the employer. In FY 2012 and FY 2013, the State contributed more than the Annual OPEB Cost, resulting in a Net OPEB Asset on the State's balance sheet.

Table 1.3
Postemployment Benefit Valuation Results
Net OPEB Obligation/(Asset) for State of Utah State Employees

		FY2012	FY2013
1	Net OPEB Liability (Asset) as of July 1	**$0**	**($5,699,063)**
2	Annual OPEB Cost	**$37,594,000**	**$37,721,835**
3	State Contribution to Trust Fund	**$43,293,063**	**$38,069,538**
4	Net OPEB Liability/(Asset) as of June 30	**($5,699,063)**	**($6,046,766)**

Actuarial Certification

The State selected Hay Group to perform an actuarial valuation of the Post-Employment Benefits Plans to provide an estimate of the Actuarial Accrued Liability, the Annual Required Contribution (ARC), and the Annual OPEB Cost under the GASB 45 accounting standard. 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. The reason for this is that actuarial standards of practice describe a "best-estimate range" for each assumption, rather than a single best-estimate value. Thus, reasonable results differing from those presented in this report could have been developed by selecting different points within the best-estimate ranges for each of the various assumptions.

The actuary certifying to this valuation is a member of the Society of Actuaries and other professional actuarial organizations, and meets the General Qualification Standards of the American Academy of Actuaries for purposes of issuing Prescribed Statements of Actuarial Opinion.

By: Robert E. Russell

Robert E. Russell, ASA, EA, MAAA, FCA
Hay Group, Inc.

By: James J. McPhillips

James J. McPhillips, FSA, EA, MAAA, FCA
Hay Group, Inc..

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 post-employment benefits other than pension benefits. The types of benefits covered include:

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

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.

It has taken GASB over 15 years to issue the standard as they first added OPEBs to their technical agenda in 1988. The delay has helped governmental employers in several ways. Over the ensuing period, private sector firms learned to grapple with the issue after the Financial Accounting Standards Board (FASB) released its exposure draft and then after due deliberation issued the final standard (FAS 106) in 1990. The actuarial and accounting professions geared up to handle the change from cash to accrual accounting. Claims administrators are now experienced with meeting the special data requests, actuaries have refined their valuation models, and accountants understand the valuation results. The actuarial profession revised and updated its Actuarial Standard of Practice, reissuing ASOP #6 — *Measuring Retiree Group Benefit Obligations* in December 2001. The GASB standard directs users to this actuarial standard for guidance on selection of actuarial assumptions.

The effective date for the new standard depends on the size of the employer. For entities with revenues in FY 2000 over $100 million, the effective date is the fiscal year beginning after December 15, 2006, although earlier adoption was encouraged. Entities with smaller revenues have later effective dates.

The purpose of the standard is to treat post-retirement benefit costs in a manner similar to pension costs. 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 will require governmental employers to adopt accrual accounting, the standard sets out a broad range of valuation options for employers. These options include the ability to choose, within limits, the:

- Actuarial cost method,
- Period for amortizing the unfunded actuarial accrued liability
- Amortization method,
- Measurement date, and
- 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 currently 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 employers who do not advance fund these benefits must begin to report OPEB liabilities in their full accrual financial statements.

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.

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 value of trust assets 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 trust assets.

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, over either an open or closed amortization period. The maximum amortization period is 30 years.

3. The 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 December 31, 2010 and as of December 31, 2012. The table also shows the Annual Required Contribution and the Annual OPEB Cost.

Table 3.1 Post-Retirement Medical State of Utah State Employees	Valuation As of December 31, 2010	Valuation As of December 31, 2012
Actuarial Accrued Liability (AAL)		
Medical		
Actives	$311,790,385	$215,577,154
Retirees	167,016,483	191,176,650
Total Medical	478,806,868	406,753,804
Life Insurance	2,585,662	1,907,366
Total AAL	**$481,392,530**	**$408,661,170**
Fair Value Assets	**$106,604,713**	**$150,107,498**
Unfunded AAL (UAAL)	$374,787,817	$258,553,672
Funded Percentage	**22.1%**	**36.7%**
Normal Cost (boy)	$11,787,856	$10,018,164
Normal Cost with interest	$12,318,310	$10,468,981
20 year amortization factor (2010 is 25 year amortization)	14.82	13.01
Amortization Payment	19,873,457	19,873,457
Annual Required Contribution (ARC)	**$37,593,636***	**$30,342,438****
Net OPEB Obligation/(Asset)	0	(6,046,766)
Interest on NOO/NOA	0	(272,104)
ARC Adjustment	0	464,778
Annual OPEB Cost	**$37,593,6361**	**$30,535,112**

* ARC for fiscal years ending in 2012 and 2013
** ARC for fiscal years ending in 2014 and 2015

Allocation of the Annual Required Contribution

For financial planning and reporting purposes, the State required that the valuation report include an allocation of the Net OPEB Obligation. A separate cost for the State employees was developed for each OPEB trust fund: Office of Education, Office of Transportation, Public Safety, and Other State Employees. The allocation of the Net OPEB Obligation was based on the ratio of the Unfunded Actuarial Accrued Liability by OPEB pool to the total Unfunded Actuarial Accrued Liability.

Table 3.2 Post-Retirement Medical State Employees	Office of Education	Office of Transportation	Public Safety	Other State Employees	Total As of December 31, 2012
Actuarial Accrued Liability (AAL)					
Medical					
Actives	7,672,851	29,955,074	11,872,782	166,076,447	$215,577,154
Retirees	4,996,825	25,161,967	19,814,322	141,203,536	191,176,650
Total Medical	12,669,676	55,117,041	31,687,104	307,279,983	406,753,804
Life Insurance	60,028	228,988	200,606	1,417,744	1,907,366
Total AAL	**12,729,704**	**55,346,029**	**31,887,710**	**308,697,727**	**$408,661,170**
Fair Value Assets	**6,090,990**	**16,376,452**	**11,197,345**	**116,442,711**	**$150,107,498**
Unfunded AAL (UAAL)	6,638,714	38,969,577	20,690,365	192,255,016	$258,553,672
Funded Percentage	**47.8%**	**29.6%**	**35.1%**	**37.7%**	**36.7%**
Normal Cost (boy)	368,022	1,288,843	537,130	7,824,169	$10,018,164
Normal Cost with interest	384,583	1,346,841	561,301	8,176,257	10,468,981
20 year amortization factor	13.01	13.01	13.01	13.01	13.01
Amortization Payment (eoy)	510,278	2,995,356	1,590,343	14,777,480	19,873,457
Annual Required Contribution (ARC)	**894,861**	**4,342,197**	**2,151,644**	**22,953,737**	**$30,342,438**
Net OPEB Obligation/(Asset)	**(34,313)**	**(862,959)**	**(942,019)**	**(4,207,474)**	**(6,046,766)**
Interest on NOO/NOA	(1,544)	(38,833)	(42,391)	(189,336)	(272,104)
ARC Adjustment	2,637	66,330	72,407	323,403	464,778
Annual OPEB Cost	**895,954**	**4,369,694**	**2,181,660**	**23,087,804**	**$30,535,112**

4. Funding

The State established a State Post-Retirement Benefits Trust Fund for purposes of advance funding retiree health benefits of current and future retirees.

Table 4.1 shows the State contributions to the Trust Fund for the fiscal years ended June 30, 2012 and June 30, 2013.

Table 4.1
Employer Contribution to Trust Fund

Period	Office of Education	Office of Transportation	Public Safety	Other State Employees	Total
Period ending June 30, 2012	$1,960,632	$5,923,844	$4,487,846	$30,920,741	$43,293,063
Period ending June 30, 2013	$1,995,673	$5,189,236	$3,903,486	$26,981,143	$38,069,538

Table 4.2 shows the market value of assets as of December 31, 2010 and December 31, 2012.

Table 4.2
Market Value of Assets

	Office of Education	Office of Transportation	Public Safety	Other State Employees	Total
As of December 31, 2010	$3,984,151	$10,614,891	$7,544,686	$84,460,986	$106,604,714
As of December 31, 2012	$6,090,990	$16,376,452	$11,197,345	$116,442,711	$150,107,498

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 credible 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 investment return assumption (discount rate) should be the estimated long-term investment yield on the investments that are expected to be used to finance the payment of benefits. The investments expected to be used to finance the payment of benefits would be plan assets for funded plans, assets of the employer for pay-as-you-go plans, or a combination of the two for plans that are being partially funded. The valuation discount rate is 4.50 percent.

Health Care Cost Trend Rates

The following table shows the health care cost trend rates that were used for the actuarial valuation of the State of Utah Employees' Retiree Health Care Plan. The trend rates in this valuation were decreased from 9.5% to 8.5% for the initial year, but the ultimate trend rate of 4.5% from 2019 and beyond was not changed.

Year	Pre-Medicare Trend	Medicare Trend	Administrative Expenses
2012	8.5%	6.9%	3.0%
2013	8.0%	6.6%	3.0%
2014	7.5%	6.3%	3.0%
2015	7.0%	5.9%	3.0%
2016	6.5%	5.6%	3.0%
2017	6.0%	5.2%	3.0%
2018	5.5%	4.9%	3.0%
2019 and on	4.5%	4.5%	3.0%

Medical Assumptions

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

The per capita costs for pre-65 retirees were developed based upon 30 consecutive months of claims and enrollments in the medical plans, as provided by PEHP. Medicare supplement claims costs were based on total premium rates in effect as of the 2012 valuation date. The per capita rates were then spread across five year age categories using actuarial morbidity factors that reflect the average increase in utilization due to aging.

Table 5.1 shows the baseline per capita claims costs that were used in the valuation for current retirees.

Table 5.1 State of Utah Per Capita Claims Costs for Valuation			
Age	Preferred	Advantage/Summit	Medicare Supplement
<45	$6,069	$5,099	
45 - 49	$6,399	$5,377	
50 - 54	$7,421	$6,235	
55 - 59	$8,789	$7,385	
60 - 61	$9,904	$8,322	
62 - 64	$10,849	$9,116	
65 - 70			$3,034
70 - 75			$3,432
75 - 80			$3,883
80 - 85			$4,287
>85			$4,506

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.

6. Financial Accounting Information

In addition to establishing the Annual Required Contribution (ARC), 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) Statements No. 43 and 45.

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

GASB 43/45 Disclosures

Table 6.1 shows the schedule of funding progress for the State of Utah Employee Other Postemployment Benefit Plan.

Table 6.1
Postretirement Medical Benefit Valuation Results
Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded Actuarial Accrued Liability (UAAL) (c) = (b-a)	Funded Ratio (d) = (a/b)	Estimated Covered Payroll (e)	UAAL as a Percentage of Covered Payroll (f) = (c)/(e)
12/31/2010	$106,604,713	$481,392,530	$374,787,817	22.1%	$589,817,000	64%
12/31/2012	$150,107,498	$408,661,170	$258,553,672	36.7%	$496,491,000	52%

Table 6.2 shows the Annual OPEB Cost for FY 2011 through FY 2013 and the actual employer contributions to the Trust Fund.

Table 6.2

Postretirement Medical Benefit Valuation Results
Schedule of Employer Contributions

Fiscal Year Ending June 30	Annual OPEB Cost	Employer Contributions	Percentage of Annual OPEB Cost Contributed
2011	$43,819,000	$43,819,000	100%
2012	$37,594,000	$43,293,000	115%
2013	$37,721,835	$38,069,538	101%

Required Supplemental Information

Table 6.3 Development of Net OPEB Obligation / (Asset)							
Fiscal Year ending June 30	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 Obligation (Asset) at end of year (g) = prior year (g) + (f)
2012	$37,594,000	($0)	($0)	$37,594,000	$43,293,063	($5,699,063)	($5,699,063)
2013	$37,594,000	($256,458)	$384,293	$37,721,835	$38,069,538	($347,703)	($6,046,766)
2014	$30,342,438	($272,104)	$464,778	$30,535,112	tbd	tbd	tbd

7. Summary of Plan Provisions

State of Utah Employees Other Postemployment Benefit Plan

State employees hired prior to January 1, 2006 who retire from the state are eligibile for post-retiree medical and life insurance benefits. The following retirement eligibility criteria applies:

State Employees		Judges	
Age	**Years of Service**	**Age**	**Years of Service**
60	20	55	20
62	10	62	10
65	4	70	6
Any age	25	Any age	25

Retiree Medical Benefits

Employees who retire under the plan are eligible to use Program I sick leave balances to purchase retiree health care coverage. 75% of Program I balances, both converted and non-converted, as of 12/31/2005 may be used to purchase retiree health care coverage at the rate of eight hours of sick leave for one month of medical coverage.

Pre-65 retirees are eligible to choose from six different medical plan designs of the Utah Public Employees Health Program (PEHP): Preferred Care, Preferred Care STAR, Advantage Care, Advantage Care STAR, Summit Care, Summit Care STAR. Program I balances purchase access to these medical plans with cost-sharing for the retiree. In addition, dental and vision plans are offered but the cost is fully paid by the retiree.

Post-65 retirees are eligible to choose from three separate Medicare Supplement plans (100, 75, and 50) offered through PEHP, as well as three Pharmacy plans (basic pharmacy, basic plus pharmacy, and enhanced pharmacy).

Retirees may elect spouse coverage both before and after age 65. However, a retiree who elects spouse coverage prior to age 65 is only required to use 8 hours of sick leave for one month of employee plus spouse medical coverage; at age 65 and after, a retiree electing spouse coverage must use 16 hours of sick leave to purchase employee plus spouse coverage. If an active employee or retiree is eligible for retiree medical benefits and dies with a Program I balance, the surviving spouse may continue medical coverage using the retiree's balance at the rate of eight hours for one month of coverage.

Retiree Life Insurance Benefits:
Participants who are hired prior to January 1, 2006 are also eligibile for life insurance benefits while receiving medical coverage up to age 65.

Participants who retire prior to July 1, 1999 receive $18,000 in life insurance.
Participants who retire after July 1, 1999 receive $25,000 in life insurance.

Retiree Contributions

The following monthly contributions apply for pre-65 retirees for the July 1, 2012 – June 30, 2013 year:

	Retiree Share	
Tier	First 18 months of retirement	After 18 months of retirement
Advantage Care / Summit Care		
Single	$41.57	$52.98
Double	$85.70	$109.23
Family	$114.41	$145.82
Preferred Care		
Single	$172.98	$220.47
Double	$356.64	$454.53
Family	$476.13	$606.83
Advantage STAR / Summit STAR		
Single	$0.00	$0.00
Double	$0.00	$0.00
Family	$0.00	$0.00
Preferred STAR		
Single	$58.10	$74.05
Double	$123.80	$157.78
Family	$208.09	$265.21

Judges – Rule for Retiree Health Benefits

Under State Rule 3-501, justices, judges, and court commissioners are eligible for the following benefits:

- Earned benefits:
  - Participants who use less than four sick leave days in a year can accumulate 8 months of medical, dental, and life insurance benefits at retirement. These benefits do not require retiree contributions.

- Automatic benefits:
  - Regardless of the preceding benefits, retired judges are eligible for 5 years of medical, dental, and life insurance benefits at retirement.

Earned benefits and automatic benefits are subject to a 7 year combined maximum payment period. A qualifying senior judge and spouse will pay 50% of the cost of medical and dental insurance premiums under this program.

Office of Education Plan

An employee of the Office of Education Plan may elect to retire either under the State plan or the Office of Education plan. Eligibility requirements for the Office of Education plan are as follows:

- At least five years of service with the Office of Education
- Eligible to participate in the State Retirement System
- Hired before July 1, 2012

Plan benefits include:

- 7.6% of annual salary (“stipend”) at retirement per year
- Medical and life insurance benefits, subject to cost-sharing as under the State Employee Retiree Health Care Plan

Benefits continue until the earlier of:

- 5 years
- The employee becomes eligible for unreduced Social Security benefits

8. Participant Data

The following table shows a historical comparison of enrollment in the State Employees' Retiree Health Care Plan.

Number of Lives			
	12/31/2008	**12/31/2010**	**12/31/2012**
Actives	**20,385**	**11,875**	**10,864**
Retirees	2,886	3,272	3,327
Dependents	2,002	2,600	2,235
Total Inactives	**4,888**	**5,872**	**5,562**
Total	**25,273**	**17,747**	**16,426**

Inactives						
	12/31/2010			**12/31/2012**		
	Retirees			**Retirees**		
	Under 65	**65 and Over**	**Total**	**Under 65**	**65 and Over**	**Total**
Count	2,126	1,146	3,272	1,911	1,416	3,327
Average Age	59.5	68.6	62.7	59.9	68.7	63.7
	12/31/2010			**12/31/2012**		
	Dependents			**Dependents**		
	Under 65	**65 and Over**	**Total**	**Under 65**	**65 and Over**	**Total**
Count	1,919	681	2,600	1,478	757	2,235
Average Age	56.7	69.1	60.0	58.6	69.1	62.2

Active State Employees - Age and Service*

Age	Years of Service										Grand Total
	<1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
25-29			82	23							**105**
30-34			428	233	28						**689**
35-39			429	640	243	20					**1,332**
40-44			267	597	464	171	15				**1,514**
45-49			220	393	449	403	138	13			**1,616**
50-54			238	400	441	444	288	93	1		**1,905**
55-59			197	347	410	466	330	126	36	2	**1,914**
60-64			148	268	280	286	187	104	33	4	**1,310**
65-69			38	93	70	86	56	19	15	8	**385**
70+			9	22	27	22	9	3		2	**94**
Grand Total	**0**	**0**	**2,056**	**3,016**	**2,412**	**1,898**	**1,023**	**358**	**85**	**16**	**10,864**

Average Age 49.8

Average Service 16.8

*Above counts exclude employees hired after 1/1/2006.

9. Appendices

9.1. Actuarial Assumptions

The demographic assumptions used are the same ones as are used in the State of Utah Retirement System 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.

DEMOGRAPHIC ASSUMPTIONS – REPRESENTATIVE RATES

Pre-Retirement Mortality Rates: See tables below.
Post-Retirement: **Public educators** (see table below)
All Others Post-Retirement: 80% of RP-2000 Combined, Males; 85% of RP-2000 Combined, Females.

	Public Educators		Public Safety and Firefighters		Local Government/Public Employees	
Age	**Male**	**Female**	**Male**	**Female**	**Male**	**Female**
20	0.00013	0.00049	0.00044	0.00044	0.00050	0.00028
25	0.00013	0.00021	0.00044	0.00044	0.00039	0.00028
30	0.00020	0.00007	0.00044	0.00044	0.00044	0.00028
35	0.00020	0.00021	0.00044	0.00044	0.00066	0.00033
40	0.00039	0.00042	0.00061	0.00061	0.00083	0.00044
45	0.00065	0.00084	0.00105	0.00105	0.00105	0.00066
50	0.00130	0.00126	0.00176	0.00176	0.00154	0.00105
55	0.00234	0.00175	0.00275	0.00275	0.00259	0.00154
60	0.00371	0.00238	0.00374	0.00374	0.00418	0.00220

Rates of Disability:

	Public Safety	Public Employees	Public Educators	Local Government	Firefighters
Age	**Unisex**	**Unisex**	**Unisex**	**Unisex**	**Unisex**
20	0.00040	0.00024	0.00012	0.00022	0.00045
25	0.00060	0.00036	0.00018	0.00033	0.00068
30	0.00120	0.00072	0.00036	0.00066	0.00135
35	0.00180	0.00108	0.00054	0.00099	0.00203
40	0.00240	0.00144	0.00072	0.00132	0.00270
45	0.00400	0.00240	0.00120	0.00220	0.00450
50	0.00520	0.00312	0.00156	0.00286	0.00585
55	0.00820	0.00492	0.00246	0.00451	0.00923
60	0.01120	0.00672	0.00336	0.00616	0.01260

Post-Retirement Mortality Rates:

	Disabled	Public Educators		Public Employees, Firefighters, Public Safety, Judges	
Age	**Unisex**	**Male**	**Female**	**Male**	**Female**
35	0.01272	0.00073	0.00046	0.00062	0.00040
40	0.01508	0.00092	0.00069	0.00086	0.00060
45	0.01787	0.00136	0.00094	0.00121	0.00096
50	0.02081	0.00222	0.00138	0.00171	0.00143
55	0.02443	0.00381	0.00339	0.00290	0.00231
60	0.02844	0.00358	0.00425	0.00540	0.00430
65	0.03256	0.00457	0.00392	0.01019	0.00825
70	0.03784	0.01198	0.00807	0.01777	0.01423
75	0.04911	0.01993	0.01280	0.03027	0.02389
80	0.07857	0.03945	0.02856	0.05149	0.03900
85	0.11770	0.07826	0.06656	0.08861	0.06583
90	0.16658	0.13702	0.12473	0.14673	0.11193

Withdrawal Rates:

	Public Safety					Public Employees											
	Years of Service					Years of Service											
	0	1	2	3	4	0		1		2		3		4		5+	
Age	Unisex					M	F	M	F	M	F	M	F	M	F	M	F
30	0.10	0.08	0.05	0.05	0.05	0.29	0.27	0.24	0.24	0.19	0.20	0.15	0.17	0.12	0.15	0.08	0.12
35	0.11	0.08	0.05	0.04	0.04	0.25	0.24	0.20	0.19	0.16	0.15	0.12	0.13	0.09	0.11	0.06	0.08
40	0.14	0.09	0.04	0.03	0.03	0.23	0.21	0.17	0.16	0.12	0.12	0.09	0.10	0.08	0.08	0.04	0.05
45	0.17	0.10	0.04	0.03	0.02	0.21	0.18	0.14	0.13	0.09	0.10	0.07	0.08	0.08	0.07	0.03	0.04
50	0.22	0.12	0.05	0.02	0.02	0.18	0.16	0.12	0.12	0.08	0.10	0.06	0.08	0.08	0.07	0.02	0.03
55	0.28	0.15	0.05	0.02	0.02	0.16	0.15	0.10	0.12	0.07	0.10	0.06	0.09	0.08	0.09	0.02	0.03
60	0.34	0.18	0.06	0.02	0.02	0.13	0.16	0.11	0.13	0.09	0.11	0.08	0.11	0.08	0.11	0.03	0.04
65	0.37	0.21	0.06	0.03	0.03	0.14	0.18	0.11	0.15	0.09	0.13	0.08	0.13	0.08	0.15	0.03	0.05
70	0.41	0.24	0.07	0.04	0.04	0.14	0.22	0.12	0.18	0.10	0.16	0.09	0.16	0.08	0.20	0.04	0.06

	Firefighters					Public Educators											
	Years of Service					Years of Service											
	0	1	2	3	4	0		1		2		3		4		5+	
Age	Unisex					M	F	M	F	M	F	M	F	M	F	M	F
30	0.09	0.03	0.03	0.03	0.03	0.13	0.16	0.12	0.14	0.10	0.14	0.08	0.13	0.06	0.11	0.04	0.08
35	0.09	0.03	0.03	0.03	0.03	0.12	0.12	0.10	0.11	0.09	0.10	0.08	0.09	0.07	0.09	0.03	0.05
40	0.09	0.03	0.03	0.03	0.03	0.11	0.12	0.09	0.09	0.08	0.07	0.08	0.06	0.07	0.06	0.02	0.03
45	0.09	0.03	0.03	0.03	0.03	0.12	0.11	0.09	0.08	0.07	0.06	0.07	0.05	0.07	0.05	0.02	0.03
50	0.09	0.03	0.03	0.03	0.03	0.13	0.10	0.10	0.08	0.07	0.06	0.07	0.05	0.07	0.04	0.01	0.02
55	0.09	0.03	0.03	0.03	0.03	0.18	0.08	0.11	0.08	0.07	0.07	0.07	0.06	0.06	0.04	0.01	0.02
60	0.09	0.03	0.03	0.03	0.03	0.19	0.09	0.12	0.08	0.08	0.08	0.07	0.06	0.07	0.05	0.01	0.03
65	0.09	0.03	0.03	0.03	0.03	0.19	0.09	0.12	0.09	0.08	0.08	0.08	0.07	0.07	0.05	0.01	0.03
70	0.09	0.03	0.03	0.03	0.03	0.21	0.10	0.14	0.09	0.09	0.09	0.08	0.07	0.08	0.05	0.01	0.03

	Local Government											
	Years of Service											
	0		1		2		3		4		5+	
Age	M	F	M	F	M	F	M	F	M	F	M	F
30	0.16	0.26	0.15	0.20	0.13	0.16	0.09	0.14	0.05	0.13	0.06	0.09
35	0.14	0.24	0.13	0.18	0.11	0.14	0.08	0.11	0.05	0.11	0.05	0.06
40	0.12	0.21	0.12	0.15	0.10	0.12	0.08	0.10	0.06	0.09	0.04	0.05
45	0.12	0.19	0.11	0.14	0.10	0.10	0.08	0.08	0.07	0.08	0.03	0.04
50	0.12	0.18	0.12	0.13	0.11	0.10	0.10	0.08	0.09	0.08	0.03	0.04
55	0.14	0.18	0.13	0.13	0.12	0.10	0.12	0.08	0.12	0.08	0.03	0.04
60	0.15	0.21	0.14	0.15	0.13	0.11	0.13	0.09	0.12	0.09	0.04	0.04
65	0.15	0.26	0.15	0.18	0.14	0.13	0.13	0.11	0.13	0.11	0.04	0.05
70	0.17	0.33	0.16	0.23	0.15	0.16	0.15	0.13	0.14	0.13	0.04	0.05

Rates of Retirement:

	Public Safety						
	Years of Service						
	0	5	10	15	20	25	30
Age	Unisex						
52	-	-	-	-	0.16	0.16	0.33
55	-	-	-	-	0.18	0.20	0.35
57	-	-	-	-	0.18	0.20	0.35
60	-	-	0.12	0.12	0.30	0.30	0.38
62	-	-	0.12	0.12	0.30	0.30	0.38
65	1.00	1.00	1.00	1.00	1.00	1.00	1.00
67	-	-	-	-	-	-	-
70	-	-	-	-	-	-	-

	Public Employees													
	Years of Service													
	0		5		10		15		20		25		30	
Age	M	F	M	F	M	F	M	F	M	F	M	F	M	F
52	-	-	-	-	-	-	-	-	-	-	0.03	0.03	0.16	0.20
55	-	-	-	-	-	-	-	-	-	-	0.03	0.04	0.18	0.20
57	-	-	-	-	-	-	-	-	-	-	0.03	0.04	0.18	0.20
60	-	-	-	-	-	-	-	-	0.05	0.15	0.10	0.15	0.23	0.40
62	-	-	-	-	0.15	0.20	0.20	0.20	0.20	0.30	0.25	0.30	0.40	0.60
65	-	-	0.40	0.45	0.40	0.45	0.40	0.45	0.40	0.45	0.50	0.45	0.50	0.45
67	-	-	0.20	0.25	0.20	0.25	0.20	0.25	0.20	0.25	0.20	0.25	0.20	0.25
70	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

	Judges						
	Years of Service						
	0	5	10	15	20	25	30
Age	Unisex						
52	-	-	-	-	-	0.12	0.25
55	-	-	-	-	-	0.12	0.25
57	-	-	-	-	-	0.12	0.25
60	-	-	-	-	-	0.12	0.25
62	-	-	0.15	0.15	0.15	0.15	0.25
65	-	-	0.15	0.15	0.15	0.15	0.25
67	-	-	0.15	0.15	0.15	0.15	0.25
70	1.00	1.00	1.00	1.00	1.00	1.00	1.00

	Public Educators													
	Years of Service													
	0		5		10		15		20		25		30	
Age	M	F	M	F	M	F	M	F	M	F	M	F	M	F
52	-	-	-	-	-	-	-	-	-	-	0.01	0.01	0.25	0.20
55	-	-	-	-	-	-	-	-	-	-	0.02	0.03	0.25	0.30
57	-	-	-	-	-	-	-	-	-	-	0.02	0.03	0.25	0.30
60	-	-	-	-	-	-	-	-	0.05	0.15	0.05	0.15	0.35	0.50
62	-	-	-	-	0.15	0.20	0.15	0.20	0.25	0.20	0.25	0.25	0.65	0.70
65	-	-	0.25	0.45	0.25	0.45	0.30	0.45	0.40	0.45	0.50	0.50	0.70	0.60
67	-	-	0.20	0.30	0.20	0.30	0.25	0.35	0.25	0.35	0.25	0.35	0.30	0.35
70	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

	Firefighters						
	Years of Service						
	0	5	10	15	20	25	30
Age	Unisex						
52	-	-	-	-	0.12	0.12	0.16
55	-	-	-	-	0.14	0.14	0.18
57	-	-	-	-	0.14	0.14	0.18
60	-	-	0.12	0.16	0.24	0.24	0.24
62	-	-	0.12	0.16	0.24	0.24	0.24
65	1.00	1.00	1.00	1.00	1.00	1.00	1.00
67	-	-	-	-	-	-	-
70	-	-	-	-	-	-	-

	Local Government													
	Years of Service													
	0		5		10		15		20		25		30	
Age	M	F	M	F	M	F	M	F	M	F	M	F	M	F
52	-	-	-	-	-	-	-	-	-	-	0.03	0.01	0.22	0.20
55	-	-	-	-	-	-	-	-	-	-	0.05	0.03	0.22	0.30
57	-	-	-	-	-	-	-	-	-	-	0.05	0.03	0.22	0.30
60	-	-	-	-	-	-	-	-	0.10	0.15	0.10	0.15	0.25	0.50
62	-	-	-	-	0.30	0.20	0.30	0.20	0.25	0.20	0.15	0.25	0.50	0.70
65	-	-	0.20	0.45	0.35	0.45	0.45	0.45	0.45	0.45	0.50	0.50	0.50	0.60
67	-	-	0.20	0.30	0.20	0.30	0.20	0.35	0.20	0.35	0.20	0.35	0.30	0.35
70	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.20	1.00	1.00	1.00

Spouse Age Difference: Females are assumed to be 3 years younger than males.

Spouse Coverage: 80% of future retirees will elect spouse coverage

ECONOMIC ASSUMPTIONS

Interest Rate: 4.5 percent compounded annually.

Pay Rate

Pay rates were provided by the State. Annual salary for Public Educators was estimated using 2,080 total annual hours. This salary was only used for purposes of estimating the 7.6% stipend benefit under the Office of Education plan.

Ancillary Demographic Assumptions

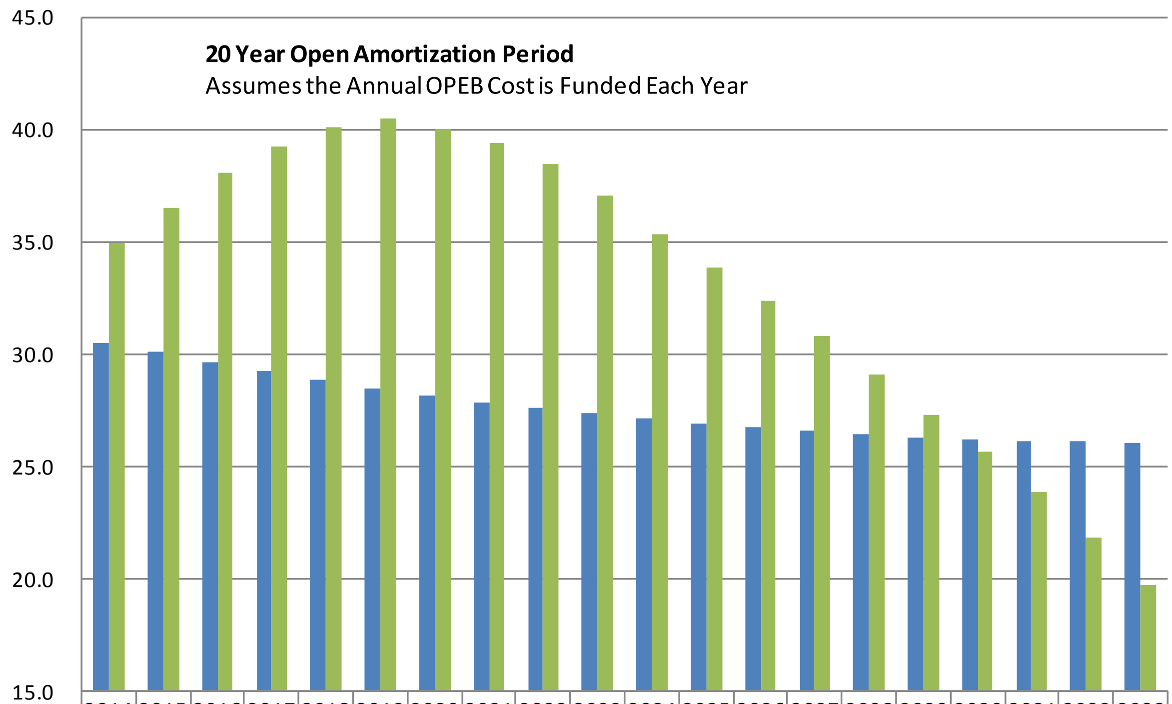
Participation Rates

This valuation assumes 100% of future eligible retirees will elect participation in post-retirement benefits. For Public Educators eligible to participate in the Office of Education plan, it is assumed 50% of Public Educators with a Program I balance will participate in the Office of Education plan. If a Public Education employee has a zero Program I balance, the valuation assumes 100% participation in the Office of Education plan.

9.2. 20 Year Projection of OPEB Cost and Net Cash Flow (retiree claims costs less retiree contributions)

Assumptions:

1. Assets will earn 4.5% return each year
2. Employer contributes 100% of Annual OPEB cost every year
3. No actuarial gains or losses



	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Annual OPEB Cost	30.5	30.1	29.6	29.2	28.9	28.5	28.2	27.9	27.6	27.3	27.1	26.9	26.7	26.6	26.4	26.3	26.2	26.1	26.1	26.1
Expected Payments	35.0	36.5	38.1	39.3	40.1	40.5	40.1	39.4	38.5	37.0	35.3	33.8	32.4	30.8	29.1	27.3	25.7	23.9	21.8	19.7