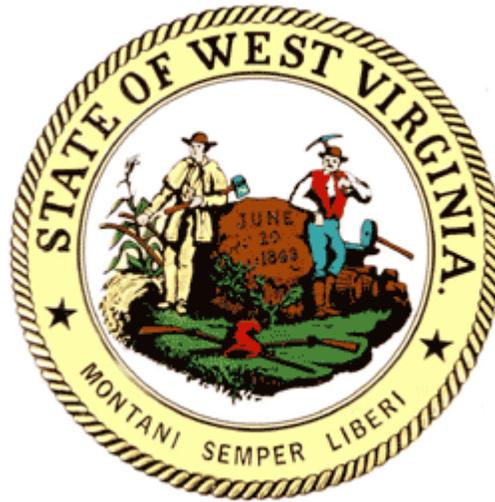




CCRC
Actuarial Services, LLC

State of West Virginia



Public Employees Insurance Agency

**Analysis of
State of West Virginia Defined Benefit
Cost-Sharing Multiple Employer
Other Postemployment Benefit Plans**

GASB 43 and GASB 45 Compliance

As of June 30, 2009

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SECTION I

Executive Summary

CCRC Actuaries, LLC (“CCRC Actuaries”) was engaged by the Public Employees Insurance Agency (“PEIA”) on behalf of the West Virginia Retiree Health Benefits Trust Fund (WVRHBT) to develop the Actuarial Accrued Liability (“AAL”), the Annual Required Contribution (“ARC”), the Annual Other Postemployment Benefits (“OPEB”) Cost, and the Net OPEB Obligation (“NOO”) for active employee and retiree health care and life insurance liabilities for Other Postemployment Benefits for the State of West Virginia (the “State”) defined benefit and defined contribution cost sharing multi-employer plans. OPEB are benefits that are provided to retired employees beyond those provided by their pension plans. The OPEB for WVRHBT includes subsidies for medical, prescription drug and life insurance benefits. These calculations include the OPEB liability of state agencies, state colleges and universities, West Virginia county school boards and non-state employers as of June 30, 2009.

GASB 43 and 45 address the liabilities associated with the rising cost of health care. Health costs continue to grow faster than national income and, despite research indicating that the employees receive good value for the increased spending, it is questionable whether governments and private employers can continue to finance the current benefit levels.

In addition to the retiree health care liability, CCRC Actuaries performed an analysis of the current liability of the Sick and Annual Leave (“SAL”) Program, a subset of OPEB, offered to public employees of the State as of June 30, 2009. OPEB plans are subject to compliance requirements as described in Statements 43 and 45 of the Governmental Accounting Standards Board (“GASB”). The SAL analysis was conducted for employees covered under the Public Employees’ Retirement System (“PERS”), Teachers’ Retirement System (“TRS”), Teachers’ Defined Contribution Retirement System (“TDC”), Teachers’ Insurance and Annuity Association and College Retirement Equities Fund (“TIAA-CREF”), County Teachers (“Plan C”), Great West (“Plan G”), West Virginia Death, Disability and Retirement Fund (“Plan A”) and West Virginia State Police Retirement System (“Plan B”).

In addition to pensions, many state and local governmental employers provide OPEB as part of the total compensation offered to attract and retain the services of qualified employees. OPEB includes postemployment healthcare as well as other forms of postemployment benefits such as life insurance. From an accrual accounting perspective, the cost of OPEB, like the cost of pension benefits, generally should be associated with the periods in which the exchange occurs, rather than with the periods when benefits are paid or provided. However, in current practice, most OPEB plans are financed on a pay-as-you-go basis, and financial statements generally do not report the financial effects of OPEB earned by the employees but not yet paid. As a result, current financial reporting generally fails to:

- Recognize the cost of benefits in periods when the related services are received by the employer.

- Provide information about the actuarial accrued liabilities for promised benefits associated with past services and whether, and to what extent, those benefits have been funded.
- Provide information useful in assessing potential demands on the employer's future cash flow.

Healthcare spending continues to increase much faster than the overall economy as defined by gross domestic product ("GDP"). Since 1970, healthcare spending has grown at an average annual rate of 9.9%, or about 2.5 percentage points faster than GDP. In recent decades, the growth rates for healthcare spending and GDP have slowed, but healthcare spending growth remains consistently above GDP growth. In 2009, healthcare spending grew by 5.7% to \$2.5 trillion. This accounted for 17.3% of the GDP in 2009. As a share of the economy, healthcare has risen from 7.2% of GDP in 1965 to over 17% of GDP today, and it is projected to be 20% of GDP in 2016.

GASB 43 and GASB 45 improve the relevance and usefulness of financial reporting by requiring systematic, accrual-basis measurement and recognition of OPEB cost over a period that approximates employees' years of service and providing information about actuarial accrued liabilities associated with OPEB and whether and to what extent progress is being made in funding the plan.

Under GASB 43 and GASB 45, the **Actuarial Accrued Liability ("AAL")** is the amount of subsidies expected to be paid to current retirees and current active members that have already been earned, measured in today's dollars. The AAL is that portion as determined by a particular Actuarial Cost Method of the Actuarial Present Value of OPEB benefits and expenses that is not provided for by future Normal Costs.

The **Annual Required Contribution ("ARC")** is the annual amount required under the actuarial cost method and funding policy for amortizing the unfunded actuarial accrued liability. The ARC is the sum of the normal cost (the amount earned in the next year) plus the amortization of the unfunded AAL.

The **Unfunded Actuarial Accrued Liability ("UAAL")** is the excess of the present value of future benefit costs exclusive of future normal cost as of the valuation date over the present value of plan assets. The current unaccounted for UAAL is required to be amortized over a period not to exceed 30 years. We have assumed this liability is amortized over 30 years.

The **Normal Cost** is that portion of the Actuarial Present Value of OPEB benefits and expenses which is allocated to a particular year by the Actuarial Cost Method.

Net OPEB Obligation ("NOO") is the cumulative difference between the Annual OPEB Cost and Actual employer Contributions. The NOO is the "balance sheet liability" for financial reporting.

To calculate the AAL for each current employee and retiree, the **Net Present Value ("NPV")** of benefits at retirement is calculated from the time of employment. Utilizing the assumed payroll growth rate and interest earnings rate, an assumed contribution in the first year of employment is

calculated such that over time, contributions and investment earnings will fund the benefits at retirement. Each subsequent year, the assumed contribution is this initial contribution inflated by the payroll growth rate.

Valuation as of June 30, 2009

The charts below summarize the OPEB liability and **Annual Required Contribution (“ARC”)** as defined by GASB 43 and GASB 45 for the trend assumptions. The lower the discount rate assumption, the higher the liability. The investment rate assumption needs to relate to the expected return on assets.

GASB 43 and GASB 45 Key Results	
<i>(in thousands)</i>	
FY 2009 ARC	338,166
6/30/2009 AAL	7,410,241
FY 2010 ARC	795,199
FY 2010 Annual OPEB Cost	791,943
NOO 6/30/2010	1,320,203

GASB 43 and GASB 45 Key Results	
<i>(in thousands)</i>	
FY 2010 ARC	795,199
6/30/2010 AAL	8,048,300
FY 2011 ARC	822,585
FY 2011 Annual OPEB Cost	816,274
NOO 6/30/2011	1,959,590

Net OPEB Obligation	
	<i>(in thousands)</i>
NOO 6/30/2008	578,031
FY 2009 Annual OPEB Cost	338,166
7/1/2008 - 6/30/2009 Contributions	<u>(235,137)</u>
NOO 6/30/2009	681,059

Net OPEB Obligation	
	<i>(in thousands)</i>
NOO 6/30/2009	681,059
FY 2010 Annual OPEB Cost	791,943
7/1/2009 - 6/30/2010 Contributions	<u>(152,799)</u>
NOO 6/30/2010	1,320,203

Net OPEB Obligation	
	<i>(in thousands)</i>
NOO 6/30/2010	1,320,203
FY 2011 Annual OPEB Cost	816,274
7/1/2010 - 6/30/2011 Contributions	<u>(176,887)</u>
NOO 6/30/2011	1,959,590

While not all employees are paid from the State's general fund, the liability detailed above includes all covered employees and retirees. The incremental cash outlay for 100% funding would need to be adjusted by the employees and retirees from local agencies to develop the cash outlay requirements from the general fund of the State.

The new regulations do not require any employer funding and allows the State to continue the current practice of pay-as-you-go financing of retiree health benefits. However, the recognition of the cost of future retiree health benefits will accumulate on the State's financial statements if assets have not been set aside to offset the liability.

The following chart documents difference between the AAL calculated as of June 30, 2008 and the AAL calculated as of June 30, 2009. Each cause is listed along with the impact on the AAL.

	<u>AAL</u>	<u>Change in AAL</u>	<u>Percent Change</u>
6/30/2008 Liability	6,362,640,000		
Annual Inflation and Demographic Changes	6,489,402,000	126,762,000	2.0%
Lower Trend Assumptions	5,548,338,000	(941,064,000)	-14.5%
Update to Cost, Capitation Rates, and Premiums	7,231,020,000	1,682,682,000	30.3%
Change in Discount Rate from 3.72% to 3.56%	7,410,241,000	179,221,000	2.5%
6/30/2009 Liability	7,410,241,000	1,047,601,000	16.5%

The change in the AAL due to annual inflation and demographic changes reflects what the AAL would have been had no assumptions changed.

The change in capitation rates and trend assumptions refer to the change in MAPD capitation rates and the change in trend assumptions established by the WVRHBT board. The difference in the discount rate is based on recent bond returns and the percent of the plan that is funded.

To reduce the ARC, the State may need to consider adopting changes to the current retiree health care program, including but not limited to:

- Increasing current levels of employee contributions for either current and future employees, or both.
- Changes to the current retiree premium structure.
- Cap State contributions on a per retiree or aggregate level.
- Decrease State contributions for retirees and/or dependents.
- Modify the current benefit structure to reduce expenses.
- Change the current OPEB to a defined contribution OPEB plan.

The preparation of any estimate of future health costs requires consideration of a broad array of complex social and economic events. This report contemplates significant financial savings impact resulting from the continuation of the Medicare Advantage Prescription Drug program for Medicare eligible retirees. Changes in reimbursement methodology, the emergence of new and expensive medical procedures and prescription drug options, and the continuing evolution of the framework of the managed care options as are contemplated in the Board's proposed plan, increase the level of uncertainty of such estimates. As such, the estimate of insurance program costs contains considerable uncertainty and variability and actual experience may not conform to the assumptions utilized in this analysis.

Respectfully,



Dave Bond, F.S.A., M.A.A.A.
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SECTION II

Overview of Other Postemployment Benefits

In addition to pensions, many state and local governmental employers provide OPEB as part of the total compensation offered to attract and retain the services of qualified employees. OPEB includes postemployment healthcare as well as other forms of postemployment benefits such as life insurance. From an accrual accounting perspective, the cost of OPEB, like the cost of pension benefits, generally should be associated with the periods in which the exchange occurs, rather than with the periods when benefits are paid or provided. However, in current practice, most OPEB plans are financed on a pay-as-you-go basis, and financial statements generally do not report the financial effects of defined benefit OPEB until the promised benefits are paid. As a result, current financial reporting for defined benefit plans generally fails to:

- Recognize the cost of benefits in periods when the related services are received by the employer.
- Provide information about the AAL for promised benefits associated with past services and whether, and to what extent, those benefits have been funded.
- Provide information useful in assessing potential demands on the employer's future cash flow.

GASB 43 and GASB 45 improve the relevance and usefulness of financial reporting by requiring systematic, accrual-basis measurement and recognition of defined benefit OPEB cost over a period that approximates employees' years of service and providing information about AAL associated with OPEB and whether, and to what extent, progress is being made in funding the plan.

GASB Statement 43 – Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans

GASB Statement 43 establishes uniform financial reporting standards for OPEB plans. The standards apply for OPEB trust funds included in the financial reports of plan sponsors, as well as for the stand-alone financial reports of OPEB plans or the public employee retirement systems that administer them.

Summary of Standards for OPEB Plans That Are Administered as Trusts

The financial reporting framework for defined benefit OPEB plans that are administered as trusts includes two financial statements and two multi-year schedules that are required to be presented as Required Supplementary Information ("RSI") immediately following the notes to the financial statements. The financial statements focus on reporting current financial information about plan net assets held in trust for OPEB and financial activities related to the administration of the trust. The *statement of plan net assets* provides information about the fair value and composition of plan assets, plan liabilities, and plan net assets held in trust for OPEB. The *statement of changes in plan net assets* provides information about the year-to-year changes in plan net assets, including additions from employer, member, and other contributions and net investment income

and deductions for benefits and refunds paid and plan administrative expenses. The required notes to the financial statements include a brief plan description, a summary of significant accounting policies, and information about contributions and legally required reserves. Actuarial information includes the current funded status of the plan, actuarial methods and assumptions used in the valuation.

Plans are required to measure all actuarially determined information included in their financial reports in accordance with certain parameters including requirements for the frequency and timing of actuarial valuations as well as for the actuarial methods and assumptions that are acceptable for financial reporting.

For financial reporting purposes, an actuarial valuation is required at least biennially for OPEB plans with a total membership of 200 or more. The projection of benefits should include all benefits covered by the current substantive plan at the time of each valuation and should take into consideration the pattern of sharing of benefit costs between the employer and plan members to that point, as well as certain legal or contractual caps on benefits to be provided. The parameters require that the selection of actuarial assumptions, including the health care cost trend rate for postemployment healthcare plans, be guided by applicable actuarial standards.

The requirements of Statement Number 43 for OPEB plan reporting are effective based on the size of the government's gross annual revenues. Under these requirements, West Virginia was first subject to the requirement for financial reporting for the fiscal year ending June 30, 2007.

GASB Statement Number 45 – Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions

GASB 45 establishes standards for the measurement, recognition and display of OPEB expense and related liabilities, note disclosures and RSI in the financial reports of state and local governmental employers. The objective of GASB 45 is to improve the faithfulness of representations and usefulness of information included in the financial reports of governmental employers regarding OPEB. The requirements of this Statement apply to the financial statements of all state and local governmental employers that provide postemployment benefits other than pension benefits.

OPEB arises from an exchange of salaries and benefits for employee services, and it is part of the compensation that employers offer for services received. OPEB includes postemployment healthcare benefits, including medical, dental, vision, and other health related benefits; and other forms of postemployment benefits – for example, life insurance, disability, long-term care, and other benefits.

Conversion of a terminating employee's unused sick leave credits to an individual account to be used for payment of postemployment benefits on the person's behalf is a termination payment. When a terminating employee's unused sick leave credits are converted to provide or to enhance a defined benefit OPEB, such as postemployment healthcare benefits, the resulting benefit or increase in benefits should be accounted for in the calculation.

Sick and Annual Leave Program

New retirees hired prior to June 30, 2001 with unused Sick and Annual Leave credits currently have the choice to receive an increased annuity payment or to convert the Sick and Annual Leave to health care benefits under the West Virginia PEIA Program. Employees hired prior to July 1, 1988 can convert two days of accrued leave for 100% of the premium for one month of single coverage and three days of accrued leave for 100% of the premium for one month of family coverage. Employees hired between July 1, 1988 and June 30, 2001 accrue monthly credits at the same rate, but for 50% of the premium for one month. Employees enrolled in a PEIA insurance plan on or after July 1, 2001 are not eligible to use unused annual and/or sick leave towards the purchase of health insurance.

Recent experience shows that approximately half of all retirees choose to use these credits for the health care premium waiver benefits under the WVRHBT. Senate Bill Number 3002, passed in 2001, created the Public Employee Leave Analysis Board (“Board”). The purpose of the Board was to:

- Analyze the fiscal impact on the State, county, school boards, and other participating entities of the current policy on conversion of annual and sick leave balances at retirement.
- Determine the projected sick leave days for all employees at their projected normal retirement date.
- Provide a full cost and benefit analysis that includes the cost of the premiums offset by the conversion, as well as enhanced retirement benefits and projected future costs.
- Utilize detailed actuarial assumptions based on individual employee and participant data, actual experience for employees and retirees, and projected future medical and prescription benefit costs.
- Calculate the monetary costs to the State, county, school boards, and other participating entities due to conversion at retirement.

The purpose of this report, in addition to the initial calculation of the GASB 43 liabilities, is to continue this reporting of the State’s liabilities as established by Senate Bill Number 3002 and as requested by WVRHBT management.

It should be noted that the cost on the pay-as-you-go basis of healthcare benefits for the retirees who choose this option is currently born by the former employer, not by WVRHBT.

Retiree Subsidy

Retiree premiums are currently subsidized by active employers and employees through active premiums. In Fiscal Year 2009, retiree premiums were \$62,921,686 compared to total expenses of \$161,861,205. This resulted in the State of West Virginia and Local governmental employers and employees subsidizing \$98,939,519 (61.1%) of retiree health care. The chart below summarizes the PEIA historical (Fiscal Years 2001 – 2009) and projected (Fiscal Years 2010 – 2015) retiree subsidy contained in the PEIA Financial Plan.

<u>Fiscal Year</u>	<u>Retiree Subsidy</u>	<u>Growth</u>
2001	(\$71,682,928)	
2002	(\$84,912,636)	18.5%
2003	(\$78,804,738)	-7.2%
2004	(\$88,751,881)	12.6%
2005	(\$105,783,066)	19.2%
2006	(\$115,355,739)	9.0%
2007	(\$122,810,810)	6.5%
2008	(\$77,241,609)	-37.1%
2009	(\$98,939,519)	28.1%
2010	(\$133,679,862)	35.1%
2011	(\$147,427,963)	10.3%
2012	(\$175,692,486)	19.2%
2013	(\$198,777,738)	13.1%
2014	(\$223,716,722)	12.5%

Under the PEIA Financial Plan adopted in December 2009, it is assumed that future retiree premium increases will equal State employee premium increases. The current 56% level of retiree subsidization is projected to increase to 67% in 2013. These subsidization levels are at a significantly lower subsidy than in recent years due to cost savings accruing to the WVRHBT through participation of the Medicare Advantage Prescription Drug program. While these projections assume continued involvement with the MAPD program, there are no federal guarantees that the program will continue in the future.

SECTION III

Methodology

Retiree Subsidy Calculation

In addition to pensions, many state and local governmental employers provide OPEB as part of the total compensation offered to attract and retain the services of qualified employees. OPEB includes postemployment healthcare as well as other forms of postemployment benefits such as life insurance. The State of West Virginia currently offers its retirees defined benefit health care coverage and life insurance coverage. From an accrual accounting perspective the cost of OPEB, like the cost of pension benefits, generally should be associated with the periods in which the exchange occurs, rather than with the periods when benefits are paid or provided. However, in current practice, most OPEB defined benefit plans are financed on a pay-as-you-go basis, and financial statements generally do not report the financial effects of OPEB until the promised benefits are paid.

GASB 43 and GASB 45 improve the relevance and usefulness of financial reporting by requiring systematic, accrual-basis measurement and recognition of defined benefit OPEB cost over a period that approximates employees' years of service and providing information about actuarial accrued liabilities associated with OPEB and whether and to what extent progress is being made in funding the plan.

Definition of GASB 43 and GASB 45 Liabilities

Under GASB 43 and GASB 45, the **Actuarial Accrued Liability (AAL)** is the accumulation to the valuation date of assumed contributions and investment earnings necessary to fund the expected benefit at retirement. The current unaccounted for AAL needs to be amortized over a period not to exceed 30 years. We have assumed this liability is amortized over 30 years. The **Normal Cost** is the assumed contribution for the next fiscal year.

To calculate the AAL for each current employee and retiree, the NPV of benefits at retirement are calculated to the date of hire. Utilizing the assumed payroll growth rate and interest earnings rate, an assumed contribution in the first year of employment is calculated such that over time, contributions and investment earnings will fund the benefits at retirement. Each subsequent year the assumed contribution is this initial contribution inflated by the payroll growth rate.

Current Age Health Care Benefits (**CAHCB**) for each individual equals the NPV of future health care benefits that were calculated for the current employee utilizing the appropriate mortality, withdrawal and retiree rates.

Entry Age Future Health Care Benefits (**EAFHCB**) for each individual equals the NPV of future health care benefits that were calculated to the entry year of employment utilizing the appropriate mortality, withdrawal and retiree rates.

Current Age Annuity Factor (**CAAF**) for each individual equals an annuity factor developed from the expected future working lifetime of the individual, the payroll growth rate and the discount factor.

With an Investment Rate of Return at 7.50%, and a Payroll Growth Rate of 5.0%, the Discount Rate (r) is equal to $((1+0.075)/(1+0.05))-1$ or 0.024.

The CAAF is $1+(1-((1+0.024))^{-(\text{expected future working lifetime at current age}-1)})/0.024$.

Entry Age Annuity Factor (**EAAF**) for each individual equals an annuity factor developed from the expected future working lifetime of the individual, the payroll growth rate and the discount factor.

With an Investment Rate of Return at 7.50%, and a Payroll Growth Rate of 5.0%, and the Discount Rate (r) is equal to $((1+0.075)/(1+0.05))-1$ or 0.024.

The EAAF is $1+(1-((1+0.024))^{-(\text{expected future working lifetime at entry}-1)})/0.024$.

The Normal Cost at Entry (**NCE**) equals the annual amount to be set aside each year for benefits at retirement, adjusted for the payroll growth rate.

$$\mathbf{NCE = EAFHCB / EAAF}$$

The Normal Cost at Current Age (**NCCA**) equals the next fiscal year amount to be set for benefits at retirement.

$\mathbf{NCCA = NCE * (1 + Payroll Growth Rate)^n}$ where n is the previous number of years employed.

Future Normal Cost at Current Age (**FNCCA**) equals the total normal cost contributions to be made in the future prior to retirement.

$$\mathbf{FNCCA = NCCA * CAAF}$$

Actuarial Accrued Liability (**AAL**) equals the total expected benefits at retirement that is not provided for by future normal costs.

$$\mathbf{AAL = CAHCB - FNCCA}$$

Illustrative Calculations

In an effort to assist the reader in understanding the calculation, this section presents examples of the liabilities and the calculation for both single active employees and for active employees with a spouse. These examples of the OPEB liability calculation for various sample employees are shown in detail on page 14.

Because the majority of the employees are members of the PERS and TRS/TDC plans, we have used the PERS plan for demonstration purposes. The average age of all employees is 57 and the average years of service is 14. The majority of the employees are female; consequently, we have selected this for our first detailed sample calculation. Each additional sample calculation has changed one variable to demonstrate the impact that certain variables have on the final results. For example, we have shown a male with the same age and years of service.

Page 16 provides the detailed calculation for a PERS employee that is:

- a single female age 47 with 14 years of service,
- a single male age 47 with 14 years of service (see example 2),
- a family coverage (example 3),
- a 57 year old female (example 4),
- a 37 year old female (example 5), and
- a 47 year old with 25 years of service (example 6).

All six of these examples are detailed on page 14 utilizing two different discount rates of 5.22% and 7.5%. The following description is for our sample female employee age 47 with 14 years of service.

One of the first things to determine in our calculation is the future years of service that the specific employee would need to work in order to achieve full retirement benefits. This will vary by each plan. For PERS, a member who has attained age 60 and has earned five or more years of contributing service is eligible for a normal retirement benefit. Also, a member who has completed at least five years of contributing service and who has attained age 55 with the sum of his age plus years of contributing service equal to or greater than 80, may retire at any age over 55 with full retirement benefits, the “Rule of 80”. For the employee age 47 with 14 years of service, the earliest that employee can reach full retirement is in 13 years at age 60.

The next criterion to determine is the probability of actually reaching full retirement. The appropriate mortality and withdrawal rates for the age, sex, and plan are applied each year the employee would need to work to determine the probability that this employee reaches full retirement. For example, for the employee age 47, there is a 0.1654% chance that the 47 year old female will be deceased in the next year and a 3.8% chance the employee will not work under this plan next year. Therefore, there is approximately a 96% chance this employee will work in this plan and achieve one more year of service towards full retirement. Similarly, there is approximately a 96% chance the employee will work in the following year. Ultimately, this results in a 68.4% probability that the 47 year old female with 14 years of service will reach the criteria required for full retirement under the PERS plan. This is detailed in the following table.

<u>Year</u>	<u>Age</u>	<u>Probability of Remaining Employed</u>	
		<u>An Additional Year</u>	<u>Cumulative</u>
1	47	0.96035	0.96035
2	48	0.96120	0.92308
3	49	0.96203	0.88804
4	50	0.96285	0.85504
5	51	0.96568	0.82570
6	52	0.96848	0.79967
7	53	0.97126	0.77669
8	54	0.97402	0.75651
9	55	0.97674	0.73892
10	56	0.97843	0.72297
11	57	0.98005	0.70855
12	58	0.98161	0.69552
13	59	0.98310	0.68377

For the PERS plan there are withdrawal rates that vary in the first six years of employment. The withdrawal rates and mortality rates vary by sex. If our example employee age 47 with 14 years of service were a male, the probability that he would reach full retirement is 74.0%.

The OPEB calculation also uses the years of service needed to reach full retirement at the employees' original hire date as well as the associated probability that they remain employed throughout these years. For our sample employee age 47 with 14 years of service, she needs to work 27 years from the original hire date to reach full retirement criteria. Similar to the previous calculation, the probability of a 47 year old male with 14 years of service remaining employed long enough to reach full retirement is 27.3%.

Once the employee has achieved full retirement criteria, retirement rates are applied to determine the probability that the employee does in fact stop working in the next year or continues to work. For our 47 year old female with 14 years of service, full retirement criteria are met at age 60. There is a 15% chance an employee age 60 with full retirement criteria met will stop working, a 15% chance an employee age 61 with full retirement criteria met will stop working, a 40% chance an employee age 62 with full retirement criteria met will stop working, etc. These retirement rates are applied to the projected number of employees still working to determine the projected number of retirees.

For each of the employees, if the employee is single it is assumed they will remain with single coverage throughout the projection. If the employee has family coverage, the mortality rates are also applied to the spouse. Claim expenses are projected on a per capita basis for both the employee and spouse.

We have developed the subsidy cost that PEIA will need to pay a retiree in future years depending on family and single status and Medicare and Non-Medicare eligibility. These assumed subsidy costs are multiplied by the projected number of retirees to develop the subsidy that PEIA would need to pay for this employee over their expected future lifetime after

retirement. Factoring in the probability that the employee actually reaches full retirement provides the Current-Age Health Care Benefits. The CAHCB is \$28,713 for our sample female. The EAFHCB is calculated using the original hire date of the employee. This is \$4,994 for our female example.

The expected future working lifetime at entry is determined by the age, sex, years of service and retirement criteria for each employee. For our sample female this is determined as approximately 12.1 years.

The 5.22% discount rate and the 5% Payroll growth rate are used to determine the EAAF. This annuity factor is equal to 11.9 for the sample female.

The \$4,994 EAFHCB divided by the 11.9 annuity factor gives a Normal Cost at Entry Age of \$419. This value along with the years of past service is used to determine the Normal Cost at Current Age. The \$419 inflated at 5% for 14 years is \$830 for our sample female.

The expected future working lifetime at current age is determined by the age, sex, years of service and retirement criteria for each employee. For our sample female this is determined as approximately 13 years. Again, the discount rate and the 5% Payroll growth rate are used to determine the CAAF. This annuity factor is equal to 12.8 for the sample female.

The FNCCA of \$10,643 is equal to the \$830 times the 12.8 years for our sample female.

The AAL is equal to the CAHCB of \$28,712 minus the FNCCA of \$10,643. This is \$18,069 for our sample 47 year old female with 14 years of service.

Sex	Years of Past Service	Current Age	Spouse Sex & Age	Current-Age Health Care Benefits to Be Paid	Entry-Age Future Health Care Benefits to Be Paid	Expected Future Working Lifetime (at Entry Age)	PV Factor of \$1 Per Year Over Expected Future Working Lifetime (at Entry Age)	Normal Cost at Entry Age	Normal Cost at Current Age	Expected Future Working Lifetime (at Current Age)	Expected Future Working Lifetime (at Current Age)	Future Normal Cost At Current Age	Actuarial	
													Liability	
				CAHCB	EAFHCB	EAAF		NCE	NCCA	CAAF		FNCCA	AAL	
								= EAFHCB / EAAF					= FNCCA x CAAF	= CAHCB - FNCCA
5.22% Discount Rate														
1	F	14	47	\$28,713	\$4,994	12.1	11.9	\$419	\$830	13.0	12.8	\$10,643	\$18,069	
2	M	14	47	23,706	4,298	12.5	12.4	348	689	13.7	13.5	9,321	14,384	
3	F	14	47	M 47	53,442	9,296	12.1	11.9	780	1,545	13.0	12.8	19,810	33,632
4	F	14	57	27,372	6,234	11.5	11.4	547	1,083	6.4	6.3	6,842	20,529	
5	F	14	37	19,517	2,214	9.9	9.8	226	448	16.1	15.9	7,110	12,407	
6	F	25	47	40,534	1,343	9.6	9.5	141	478	10.5	10.4	4,967	35,566	

Sex	Years of Past Service	Current Age	Spouse Sex & Age	Current-Age Health Care Benefits to Be Paid	Entry-Age Future Health Care Benefits to Be Paid	Expected Future Working Lifetime (at Entry Age)	PV Factor of \$1 Per Year Over Expected Future Working Lifetime (at Entry Age)	Normal Cost at Entry Age	Normal Cost at Current Age	Expected Future Working Lifetime (at Current Age)	Expected Future Working Lifetime (at Current Age)	Future Normal Cost At Current Age	Actuarial	
													Liability	
				CAHCB	EAFHCB	EAAF		NCE	NCCA	CAAF		FNCCA	AAL	
								= EAFHCB / EAAF					= FNCCA x CAAF	= CAHCB - FNCCA
7.5% Discount Rate														
1	F	14	47	\$16,440	\$2,118	12.1	10.6	\$200	\$395	13.0	11.3	\$4,471	\$11,968	
2	M	14	47	13,988	1,879	12.5	11.0	171	339	13.7	11.9	4,025	9,963	
3	F	14	47	M 47	31,085	4,005	12.1	10.6	377	747	13.0	11.3	8,455	22,630
4	F	14	57	18,080	3,050	11.5	10.2	299	591	6.4	6.0	3,531	14,549	
5	F	14	37	9,024	758	9.9	8.9	85	169	16.1	13.6	2,286	6,738	
6	F	25	47	25,087	486	9.6	8.7	55	189	10.5	9.4	1,782	23,305	

Sick and Annual Leave Calculation

We have projected the current liability to the State of West Virginia of the current program for 50% and 100% SAL participants. The current liability or cost to the State includes the present value of both the free or discounted medical premiums and the annuity differential for retirees who choose each respective option. It is important to note that Low Trend assumptions will result in a greater percentage of retirees choosing the medical premium waiver benefit in the future from the recent experience of approximately half of all retirees.

Our approach in completing this analysis was to:

- 1) Develop appropriate assumptions that reflect actual experience of the various retirement plans and PEIA experience. These assumptions include rates of retirement, rates of voluntary withdrawal, mortality rates of active employees and retirees, investment rates of return, retiree option participation rates, and salary increases. All demographic assumptions were unchanged from the prior report. In addition, the expected increase in PEIA premiums and the investment rate available to the employee were judged to be critical assumptions and may be worthy of alternative scenarios.
- 2) Collect and collate active employee data supplied by the Department of Administration. Data problems were identified and reported to the Department for possible correction. For the SAL, we analyzed the number of sick leave days based on the information provided for each employee as of June 30, 2009.
- 3) Project the current liability of the SAL Program to the State of West Virginia. This liability represents the present value of the marginal increases in retiree pension amounts for those exercising the defined annuity benefit, as well as the present value of the waived medical premiums as a result of this election. However, since the Consolidated Public Retirement Board (“CPRB”) currently accrues the anticipated liability resulting from the increased annuities through the excise of Sick and Annual Leave liabilities, these liabilities are not part of the OPEB.
- 4) Analyze and develop individual employee decision matrices based on information for each employee and the assumption that the employee would generally make the decision resulting in the most favorable financial outcome.
- 5) For the single active employees, it is assumed that their coverage remains single throughout the projection. For the current employees with family coverage, we have assumed that a portion of these employees would change to single coverage during the projection. Based on the current distribution of retirees between single and family coverage, we have projected that approximately 77% of the active family employees should be evaluated as family coverage at retirement, while the other 23% should be evaluated as single coverage to reflect the expected future change in coverage.

SECTION IV

Actuarial Assumptions

OPEB Key Assumptions

The GASB 43 and GASB 45 require that the selection of actuarial assumptions be guided by standards of the actuarial profession. Assumptions should be placed on expected long-term future trends. In the interest of consistency, we will use information and assumptions currently incorporated by the Consolidated Public Retirement Board with respect to methodology, demographic movements and salary scale assumptions:

1. Actuarial Cost Methods

The State of West Virginia currently employs the Entry Age Actuarial Cost Method in its other defined benefit pension valuations, and this methodology will be used in the OPEB valuation. Under this methodology, the Actuarial Present Value of the Projected Benefits of each individual included is allocated on a level basis over the earnings or service of the individual between entry age and assumed exit ages. The portion of the Actuarial Present Value allocated to a valuation year is called the Normal Cost. The portion of the Actuarial Present Value not provided for at a valuation date by the Actuarial Present Value of future Normal Costs is called the Actuarial Accrued Liability.

The Amortization method is as a level percentage of the projected payroll of active plan members on a closed group basis.

2. Healthcare Cost Trend Rate

The healthcare cost trend rate is the rate of change in per capita health claims cost over time as a result of factors such as medical inflation, utilization of healthcare services, plan design, and technological services.

CCRC Actuaries performed the detailed medical and prescription drugs trend analysis for PEIA in the report titled, "PEIA FY2009 Detailed Medical and Prescription Drug Claim Trend Report". This report includes the detailed trend analysis of PEIA experience by medical and prescription drugs category and whether PEIA or Medicare was primary. Based on the analysis, the Financial Plan was adjusted to reflect a FY 2010 Non-Medicare medical claim trend of 6.0%. In addition, the Medicare medical claim trend was also changed to 6.0% in FY 2010. Based on PEIA's prescription drug experience, the Financial Plan trend assumption for all prescription drugs coverage changed to 11.0% in FY 2009. In addition, we have assumed that trends will increase by 0.5% in each successive fiscal year beginning in FY 2011.

3. Trend Assumptions

3a. Medical and Prescription Drug Trend Scenario

The Baseline Trend Assumption of the OPEB calculation assumes the trend rates of the WVRHBT Financial Plan adopted in December 2009 by the Finance Board. It should be noted that this scenario assumes that no benefit or provider reimbursement changes are implemented to reduce the underlying trend. Those assumptions for the first ten years of the projection are shown in the chart below:

Retiree Medical and Prescription Drug Trend Assumptions

	<u>Medical</u>		<u>Drugs</u>		<u>Admin</u>	<u>Total</u>
	<u>Medicare</u>	<u>Non-Medicare</u>	<u>Medicare</u>	<u>Non-Medicare</u>		
2010	6.0%	6.0%	11.0%	11.0%	5.0%	7.4%
2011	6.5%	6.5%	11.5%	11.5%	5.0%	7.9%
2012	7.0%	7.0%	12.0%	12.0%	5.0%	8.4%
2013	7.5%	7.5%	12.5%	12.5%	5.0%	9.0%
2014	8.0%	8.0%	13.0%	13.0%	5.0%	9.5%
2015	8.0%	8.0%	13.0%	13.0%	5.0%	9.6%
2016	8.0%	8.0%	13.0%	13.0%	5.0%	9.6%
2017	8.0%	8.0%	13.0%	13.0%	5.0%	9.7%
2018	8.0%	8.0%	13.0%	13.0%	5.0%	9.7%
2019	8.0%	8.0%	13.0%	13.0%	5.0%	9.8%
2020	7.5%	7.5%	12.0%	12.0%	5.0%	9.2%
2021	7.0%	7.0%	11.0%	11.0%	5.0%	8.5%
2022	6.5%	6.5%	10.0%	10.0%	5.0%	7.9%
2023	6.0%	6.0%	9.0%	9.0%	5.0%	7.2%
2024	5.5%	5.5%	8.0%	8.0%	5.0%	6.5%
2025	5.5%	5.5%	7.0%	7.0%	5.0%	6.1%
2026	5.5%	5.5%	6.0%	6.0%	5.0%	5.7%
2027	5.5%	5.5%	5.5%	5.5%	5.0%	5.5%
2028	5.5%	5.5%	5.5%	5.5%	5.0%	5.5%
2029	5.5%	5.5%	5.5%	5.5%	5.0%	5.5%

The total composite rate in 2029 was assumed for years 2030 and after.

3b. Historical Retiree Medical and Prescription Drug Trends

The chart below summarizes the retiree medical and prescription drug trends observed for the plan using data through December 2009. It is important to note that these trends have not been adjusted to reflect savings as a result of the expansion of the drug rebate program or the claim savings due to changes in provider reimbursement methodologies nor changes in the benefit structure.

<u>Fiscal Year</u>	<u>Medical Medicare</u>	<u>Medical Non-Medicare</u>	<u>Drugs Medicare</u>	<u>Drugs Non-Medicare</u>	<u>MAPD</u>	<u>Total</u>
2003	3%	-18%	11%	0%	N/A	0%
2004	10%	0%	3%	-2%	N/A	5%
2005	6%	-2%	16%	1%	N/A	8%
2006	6%	5%	11%	17%	N/A	9%
2007	6%	1%	6%	6%	N/A	5%
2008	N/A	6%	N/A	-10%	N/A	-35%
2009	N/A	-1%	N/A	4%	22%	8%
2010*	N/A	-1%	N/A	1%	38%	15%

* Fiscal Year 2010 results are through the first six months.

PEIA has contracted with Humana and Coventry to provide MAPD Benefits to Medicare-eligible retired employees and dependents. Under this arrangement, Humana and Coventry has assumed the financial risk of providing comprehensive medical and prescription drug coverage with limited copayments. As a result, Fiscal Year 2008 through 2010 Medicare trends are non-credible.

4. **Retirement Assumptions**

Retirement assumptions in the valuation were provided from the various defined benefit plans administered by the CPRB. See Appendix A for details.

5. **Mortality, Voluntary Withdrawal, and Future Salary Assumptions**

Mortality, withdrawal and wage-based assumptions in the valuation were provided from the various defined benefit plans administered by the CPRB. See Appendix A for details.

6. **Actuarial Value of Plan Assets**

The actuarial value of plan assets is measured at fair value.

7. Payroll Growth Rates

Payroll growth rates vary by plan. For PERS, assumed compensation increases range from 4.25% to 6.0%. For TRS/TDC, assumed compensation increases range from 3.5% to 5.0%. For Troopers Plan A and B, compensation is assumed to increase 6.0% per year for the first 5 years of service, 5.5% for the next 5 years, and 4.75% per year thereafter.

8. Retiree Premium Inflation Assumptions

Historically, PEIA has only shown modest increases in retiree premiums, averaging approximately 3% annual increases over the past ten years, while the underlying cost of retiree coverage has grown dramatically. This has resulted in a retiree subsidy to the extent that retirees only paid approximately 35% of their cost of insurance in Fiscal Year 2007. In general, the underlying cost of retiree medical coverage has experienced annual trends of 8% to 18%. It should be further noted that the FY 2009 medical premiums remained unchanged for non-Medicare retirees and for Medicare retirees. In FY 2010 through FY 2013, the Baseline Scenario assumed increases as shown below and as adopted in the West Virginia PEIA Financial Plan. Based on this information, we have developed a baseline scenario, which assumes that the long-term rate of inflation of retiree PEIA premiums will grade down to an ultimate policy inflation rate of 5.5% with age rating.

	FY 2010	FY 2011	FY 2012	FY 2013
Retiree Premium	\$2,694,586	\$2,500,000	\$8,200,000	\$8,400,000
Percentage	4%	4%	12%	11%

9. Investment or Discount Rate Assumptions

Assumed discount rates reflect the time value of money as of the measurement date in determining the present value of future cash outflows for postretirement benefit payments. The calculation was performed using two alternative investment and discount rate assumptions based on the level of future funding of the WVRHBT. Under the Baseline scenario, the investment rate of 3.56% was developed under the assumption that funding will continue to be ad hoc and not sufficient to cover the full cost of the ARC in the near future

10. Probability of Active Employee Choosing Healthcare at Retirement

10a. Life Only Actives

Historically we have assumed that this probability is zero. However, PEIA conducted an analysis that indicated that 77 out of 472 recent retirees with life only coverage as an active employee choose PEIA healthcare coverage at retirement. This represents 16.3% of retirees with a choice in this category.

There were 13,373 employees that have life only coverage. These employees were all evaluated assuming they had single coverage. For purposes of this calculation, we have assumed that 16% of life only actives choose retiree medical coverage.

10b. Medical Actives

Historically, we have assumed that this probability is 100%. However, PEIA conducted an analysis that indicated that 8,919 out of 10,762 recent retirees with PEIA medical coverage as an active employee choose PEIA healthcare coverage at retirement. This represents only 82.9% of retirees with a choice in this category.

For purposes of this calculation, we have assumed that 83% of medical actives choose retiree medical coverage.

11. Probability of a new retiree choosing the healthcare premium waiver over annuity increases offered as an option

We utilized the same methodology as employed in previous years that bases the decision on the present value of the health care benefit versus the present value of the annuity benefit. No calculation is necessary for teachers covered under the defined contribution plan, as the annuity option is not available.

12. Probability that family coverage in the future will stay as family coverage or become single coverage

For the retiree subsidy calculation, we modeled this probability based on spouse mortality. For the SAL calculation, we have assumed that 77% of family coverages will remain as family coverages and 23% will switch to single coverage. This assumption was developed based on historical coverage distribution for retirees.

13. Accrual of Future Benefits

The SAL liability is calculated using two different approaches: The first approach calculates the liability based on the amount of Sick and Annual Leave accrued as of June 30, 2009, assuming **no further** accumulations of sick time. The second approach calculates the liability based under the assumption that the employee will **continue** to accrue Sick and Annual Leave based on the employee's history of accumulating sick leave time.

For the retiree subsidy analysis, we assume no new active employees in the projection. The employees and retirees as of June 30, 2009 make up the future retirees and the corresponding liability.

14. Plan A vs. Plan B Coverage for Non-Medicare Retirees

The calculation will assume that an employee with Plan A or Plan B coverage will elect the same level of plan coverage at retirement.

15. Retiree Per Person and Policy Costs

Effective July 1, 2007, the medical and prescription drug risk for Medicare eligible retirees was assumed by a managed care organization. The WVRHBT remains at risk for all retirees not eligible for Medicare. The non-Medicare retiree policy costs were developed from audited FY 2009 results. The assumptions are as follows:

Coverage	Cost
<u>Retiree Non-Medicare PPB</u>	
Single	\$6,047
Member and Children	2,773
Family	5,093

These policy costs were then converted to a per capita basis in order to develop the OPEB liability.

MAPD Capitations

The medical and prescription drug risk for Medicare eligible retirees was assumed by a managed care organization under the Medicare Advantage Prescription Drug program effective July 1, 2007. Under this agreement, the WVRHBT is responsible for annual capitation based on the amounts below:

- Retirees - \$2,880 annual capitation in FY 2010

Life Insurance

West Virginia has previously set rates for life insurance at a blended rate for actives and retirees. New rates for actives and retirees have been developed to eliminate the subsidy that retirees have been receiving from active employees. West Virginia management has provided CCRC Actuaries with the new rates assuming no blending with actives and retirees.

- New active rate decreases from \$0.512 to \$0.499 per \$1,000 insured
- New retiree rate increases from \$0.512 to \$2.450 per \$1,000 insured

For the OPEB Liability calculation, the cost per person for life insurance has been determined to be \$77.96 in 2009. This has been calculated using the \$3,376,373 total subsidy divided by the 34,583 medical retirees and the 8,727 life only retirees. Insurance costs have assumed to increase at 1.0% per year.

16. Medical Premiums

For the purposes of the projection of program costs, we have assumed that the cost of retiree monthly premiums in Fiscal Year 2010 will be based on the current rates as illustrated in the chart below.

Fiscal Year 2010 Non-Medicare Monthly Premium Rates

Years of Service	Policyholder Only		Policyholder with Non-Medicare Dependents		Policyholder with Medicare Dependents	
	Standard	Preferred	Standard	Preferred	Standard	Preferred
0 to 9	\$812	\$787	\$1,937	\$1,887	\$1,356	\$1,306
10 to 14	625	600	1,459	1,409	1009	959
15 to 19	436	411	984	934	665	615
20 to 24	325	300	698	648	458	408
25 and Over	252	227	507	457	318	268

Fiscal Year 2010 Medicare Monthly Premium Rates

Years of Service	Policyholder Only		Policyholder with Non-Medicare Dependents		Policyholder with Medicare Dependents	
	Standard	Preferred	Standard	Preferred	Standard	Preferred
0 to 9	\$349	\$324	\$1,176	\$1,126	\$722	\$672
10 to 14	256	231	884	834	521	471
15 to 19	163	138	592	542	321	271
20 to 24	108	83	416	366	198	148
25 and Over	71	46	299	249	119	69

SECTION V

Data Sources and Analysis

The OPEB analysis was based on a combination of databases maintained and provided by the State of West Virginia. We created our database using data primarily found in the June 2009 active employee and retiree billing file provided by PEIA. We extracted all primary employees listed as active that had either health care coverage or life only plans. We deleted all duplicated records based on employee identifier. We extracted spousal information from this same database.

Once completed, we crosschecked this data against the sick and annual leave database collected and provided by the Department of Administration Financial Accounting and Reporting Section (“FARS”). Whenever an employee was found in the Department of Administration database, we used the salary and Sick and Annual Leave balances found there.

For those not found in the Department of Administration database, we needed to generate years of service, and their Sick and Annual Leave balances. We generated years of service by averaging the number of years of service for TRS (our largest group) found in the FARS database. Once the years of service had been calculated, we generated the Sick and Annual Leave balances by averaging the balances of TRS in service time groups of five years (i.e. 0-4 years, 5-9 years, 10-14 years, etc.).

	PERS	TDCRS	TIAA-CREF	Great West	TRS	Troopers Plan A	Troopers Plan B	Undefined Group	Total
Pre 7/1/88	4,264	83	1,824	0	14,789	57	3	1,753	22,773
7/1/88-6/30/91	1,328	40	660	0	2,565	43	1	258	4,895
7/1/91-6/30/01	6,483	169	2,510	2	10,653	68	249	1,117	21,251
Post 6/30/01	9,864	108	5,022	124	10,515	0	226	715	26,574
Total	21,939	400	10,016	126	38,522	168	479	3,843	75,493

Retiree Data Analysis

The current retiree data was extracted from the June 2009 billing file provided by Larry Stover of PEIA. Included in that database was information on 34,596 retirees. Of those retirees, there were 15,478 that had spouses. The spousal information (gender, age) was extracted for use in the projection of family and survivor coverage.

SECTION VI

Sick and Annual Leave Program Analysis

The purpose of this analysis was to project the SAL liability of the State for active employees and current retirees of the SAL Program. Employees under each of these retirement systems hired before July 1, 2001, with the exception of TDC, currently have the choice of exchanging accumulated sick days for either PEIA medical premium waiver or increased defined annuity benefit values at retirement. Teachers hired since July 1, 1991, who are still covered under TDC, are not eligible for a defined benefit pension and only have the option to convert accumulated sick days for PEIA premiums at retirement. It should be noted that the current liability, or cost to the State, is calculated to be the present value of both free and discounted PEIA medical premiums and the annuity differential for retirees who choose each respective option. Only those choosing the discounted PEIA medical premiums are included in the OPEB liability. We have projected the retiree election of the PEIA premium benefit versus the upgraded annuity increase on the basis of the expected value of each option. Employees hired before July 1, 1988 are eligible for the 100% medical premium waiver while employees hired after June 30, 1988 and before July 1, 2001, are eligible for only 50% of the medical premium waiver.

As of June 30, 2009, employees of the State of West Virginia will have accrued 6,147,987 days of sick leave. The average sick leave days for all employees are shown by the following plans:

Plan		Days of Sick Leave	Number of Employees	Average Sick Days Leave
PERS	Before 7/1/1988	911,897	4,264	213.86
	7/1/1988 - 6/30/2001	714,062	7,811	91.42
TDCRS	Before 7/1/1988	11,436	83	137.78
	7/1/1988 - 6/30/1991	4,519	40	112.97
	7/1/1991 - 6/30/2001	13,160	169	77.87
TIAA-CREF	Before 7/1/1988	340,305	1,824	186.57
	7/1/1988 - 6/30/1991	82,087	660	124.37
	7/1/1991 - 6/30/2001	212,264	2,510	84.57
Great West	Before 7/1/1988	0	0	0
	7/1/1988 - 6/30/1991	0	0	0
	7/1/1991 - 6/30/2001	54	2	26.96
TRS	Before 7/1/1988	2,609,829	14,789	176.47
	7/1/1988 - 6/30/1991	250,083	2,565	97.5
	7/1/1991 - 6/30/2001	583,631	10,653	54.79
Troopers Plan A	Before 7/1/1988	20,530	57	360.17
	7/1/1988 - 6/30/2001	31,328	111	282.24
Troopers Plan B	Before 7/1/1988	890	3	296.61
	7/1/1988 - 6/30/2001	44,689	250	178.76
Undefined Group	Before 7/1/1988	232,928	1,753	132.87
	7/1/1988 - 6/30/1991	24,348	258	94.37
	7/1/1991 - 6/30/2001	59,947	1,117	53.67
TOTAL		6,147,987	48,919	126.68

The charts in Appendix C summarize all employees by Plan, age, salary, accrued leave, and years of service.

For the Sick and Annual Leave analysis, the number of accumulated sick leave days for each employee as of June 30, 2009 was analyzed and projected as appropriate. The liability was calculated using two different approaches. The first approach calculated the liability based on the amount of Sick and Annual Leave accrued as of June 30, 2009, assuming **no further** accumulations of time. The second approach calculated the liability based under the assumption that the employee will **continue** to accrue Sick and Annual Leave based on the employee's history of accumulating sick leave time. The second approach is included in the OPEB liability. For each employee, the value of the PEIA premium waiver benefit and the annuity increase was projected based on the employee's age, medical coverage type, anticipated time of retirement, gender, years of service, salary and plan type.

For the employees who were hired before July 1, 2001, Appendix D presents a summary of the projected number of days of sick leave that they are expected to have accumulated at their projected retirement date. These reports present the year the employees are expected to retire, the projected number of sick leave days these employees would have as of this date and the average sick leave days per person. The projection for all employees, as well as the projection separated by plan, is presented for years 2010 through 2038.

In order to project the current employee's expected retirement date and number of sick leave days, we first sorted the employees by plan. Based on each plan's specific criteria for achieving normal and reduced retirement benefits, we selected the earliest possible retirement year for each employee utilizing their specific age and years of service. To project the number of sick leave days at retirement, historical accumulation rates were determined. The sick balance for each employee as of June 30, 2009 divided by the current years of service provided an annual accumulation rate. Based on this rate, the sick balances were projected forward to the expected retirement date.

In reviewing the myriad of assumptions required to conduct this analysis, the most important assumption in developing both the liability under the SAL Program, as well as determining which benefit option the employee would be most likely to choose, is the expected future increase in PEIA premiums. We have varied the health inflation assumption as follows:

- Baseline Assumption – trends consistent with the PEIA Financial Plan as developed in December 2009, ultimately grading down to a trend of 5.5% with age rating. This scenario would be consistent with projected increases in retiree deductibles and coinsurance.

One of the results of our analysis shows which type of benefit the retirees would choose. Based on the future accumulated credits, employees were assumed to evaluate the net present value of either PEIA medical premium waiver or increased defined annuity benefit values at retirement and accurately choose the benefit most advantageous to the employee. The benefit liability for CPRB is currently calculated using a 3.56% investment rate to discount the liabilities.

Last year, we had projected that approximately 83% of the retirees would ultimately elect the medical premium waiver. We are now projecting that approximately 58% of the retirees, who are hired prior to 7/1/1988, will elect the medical premium waiver. We are projecting that this will increase to approximately 83% for retirees who hired after 7/1/1988

The total Sick and Annual Leave liability can be found in Sections VII and VIII.

The decision for future retirees based on a 3.56% discount rate is summarized in the following tables:

Projected PEIA Waiver Program

Plan		Number of Employees
PERS	Before 7/1/1988	2,847
	7/1/1988 – 6/30/2001	5,465
TRS/TDC	Before 7/1/88	6,798
	7/1/1988 – 6/30/1991	778
	7/1/1991 – 6/30/2001	10,653
Plan D	Before 7/1/88	83
	7/1/1988 – 6/30/1991	40
	7/1/1991 – 6/30/2001	169
Plan F	Before 7/1/88	1,824
	7/1/1988 – 6/30/1991	660
	7/1/1991 – 6/30/2001	2,510
Plan G	Before 7/1/88	0
	7/1/1988 – 6/30/1991	0
	7/1/1991 – 6/30/2001	1
Troopers Plan A	Before 7/1/1988	0
	7/1/1988 – 6/30/2001	0
Troopers Plan B	Before 7/1/1988	1
	7/1/1988 – 6/30/2001	13
Undefined Group	Before 7/1/88	1,753
	7/1/1988 – 6/30/1991	258
	7/1/1991 – 6/30/2001	1,117
Before 7/1/1988		13,306 (58%)
After 7/1/1988		21,665 (83%)
TOTAL		34,970 (71%)

Projected Annuity Increases

Plan		Number of Employees
PERS	Before 7/1/1988	1,417
	7/1/1988 – 6/30/2001	2,346
TRS/TDC	Before 7/1/88	7,992
	7/1/1988 – 6/30/1991	1,787
	7/1/1991 – 6/30/2001	0
Plan D	Before 7/1/88	0
	7/1/1988 – 6/30/1991	0
	7/1/1991 – 6/30/2001	0
Plan F	Before 7/1/88	0
	7/1/1988 – 6/30/1991	0
	7/1/1991 – 6/30/2001	0
Plan G	Before 7/1/88	0
	7/1/1988 – 6/30/1991	0
	7/1/1991 – 6/30/2001	1
Troopers Plan A	Before 7/1/1988	57
	7/1/1988 – 6/30/2001	111
Troopers Plan B	Before 7/1/1988	2
	7/1/1988 – 6/30/2001	237
Undefined Group	Before 7/1/88	0
	7/1/1988 – 6/30/1991	0
	7/1/1991 – 6/30/2001	0
Before 7/1/1988		9,467 (42%)
After 7/1/1988		4,481 (17%)
TOTAL		13,949 (29%)

SECTION VII

Retiree Subsidy – Fiscal Year 2009 GASB 43 and 45 Calculation

The liability for the OPEB and the Sick and Annual Leave Calculation was developed assuming underlying medical trends consistent with the PEIA Financial Plan as developed in December 2009, ultimately grading down to a trend of 5.5% with age rating. This analysis utilized retirement, withdrawal, mortality and wage-based assumptions currently utilized in the valuation of the various defined benefit plans administered by the Consolidated Public Retirement Board (“CPRB”). The benefit liability for CPRB is currently calculated using a 7.5% investment rate to discount the liabilities.

The annual required contribution is the annual amount required under the actuarial cost method and funding policy for amortizing the unfunded actuarial accrued liability. The ARC is the sum of the normal cost and the thirty-year amortization as a level percentage of payroll of the actuarial accrued liability that has not been funded.

Detailed results, for the OPEB liability and the Sick & Annual Leave liability as well as projected 10 year cash flows can be found in Appendix E. The charts below summarize the OPEB liability for both assumed investment rate assumption scenarios.

Annual Required Contribution FY 2010 (“ARC”)	
<i>(in thousands)</i>	
Normal Cost Component	
Normal Cost	\$478,063
Interest	17,019
Total Normal Cost	\$495,082
Amortization Component	
AAL	\$7,410,241
Less: Assets	397,414
UAAL	7,012,826
Divided by PV factor	29.17
Amortization payment	240,384
Interest	8,558
Total Amortization Payment	\$248,942
Annual Required Contribution	\$744,024

The ARC is the annual amount that needs to be paid to fully pre-fund the subsidies and the Annual OPEB cost is the related annual accounting expense. The annual OPEB cost is made up of the ARC, the interest on the Net OPEB Obligation (“NOO”), and the amortization of the NOO. The NOO is the ongoing balance sheet item that shows the difference between the annual OPEB cost and what the employers have actually contributed. The charts below show the estimated annual OPEB cost and NOO as of July 1, 2009 and July 1, 2010:

Annual OPEB Cost	
	<i>(in thousands)</i>
FY 2010 ARC	795,199
Interest on NOO	34,053
Amortization of NOO	<u>(37,309)</u>
FY 2010 Annual OPEB Cost	791,943

Annual OPEB Cost	
	<i>(in thousands)</i>
FY 2011 ARC	822,585
Interest on NOO	66,010
Amortization of NOO	<u>(72,322)</u>
FY 2011 Annual OPEB Cost	816,274

The following chart shows the historic NOO as of June 30, 2009 and the projected NOO as of June 30, 2010 and June 30, 2011:

Net OPEB Obligation	
	<i>(in thousands)</i>
NOO 6/30/2008	578,031
FY 2009 Annual OPEB Cost	338,166
7/1/2008 - 6/30/2009 Contributions	<u>(235,137)</u>
NOO 6/30/2009	681,059

Net OPEB Obligation	
	<i>(in thousands)</i>
NOO 6/30/2009	681,059
FY 2010 Annual OPEB Cost	791,943
7/1/2009 - 6/30/2010 Contributions	<u>(152,799)</u>
NOO 6/30/2010	1,320,203

Net OPEB Obligation	
	<i>(in thousands)</i>
NOO 6/30/2010	1,320,203
FY 2011 Annual OPEB Cost	816,274
7/1/2010 - 6/30/2011 Contributions	<u>(176,887)</u>
NOO 6/30/2011	1,959,590

In Fiscal Year 2010, the WVRHBT is projected to total \$218,630,000 in revenues and the chart below illustrates the source of these revenues

Fiscal Year 2010 Contributions and Revenue Sources (in thousands)	
Local Agencies - Pay Go Premiums	\$18,671
State Agencies Employers - Pay Go Premiums	83,630
State Agencies Employees - Pay Go Premiums	20,964
Retiree Premiums - PPB	63,025
Retiree Premiums - MCO	2,806
Non Par Premiums	3,192
<u>Investment Income</u>	<u>26,341</u>
Total	\$218,630

The funded ratio is the ratio of the present value of contributions that have been made for current members to the present value of the liability that has already been accrued based on the funding method. A funded ratio of 100% would indicate that all benefits that have been accrued have been funded as of the valuation date. On the other hand, a funded ratio of less than 100% indicates that all benefits that have been accrued have not been funded as of the valuation date.

Funded Status as of June 30, 2008	
	<i>(in thousands)</i>
AAL	6,362,640
Assets	254,818
Unfunded Liability	6,107,823
Funded Ratio	4.00%

Funded Status as of June 30, 2009	
	<i>(in thousands)</i>
AAL	7,410,241
Assets	397,414
Unfunded Liability	7,012,826
Funded Ratio	5.36%

Funded Status as of June 30, 2010	
<i>(in thousands)</i>	
AAL	8,048,300
Assets	416,534
Unfunded Liability	7,631,766
Funded Ratio	5.18%

The chart below shows the historic and projected percent of ARC funded. A percent below 100% relates to how much of the present value of the benefit being earned in the current year will be shifted to the future.

Percentage of ARC Contributed	
<i>(in thousands)</i>	
FY 2009 Contributions	235,137
FY 2009 ARC	338,166
Percentage of 2009 ARC Contributed	69.53%
FY 2010 Contributions	152,799
FY 2010 ARC	795,199
Percentage of 2010 ARC Contributed	19.22%
FY 2011 Contributions	176,887
FY 2011 ARC	822,585
Percentage of 2011 ARC Contributed	21.50%

The covered payroll is the total payroll of all current members that are eligible to receive subsidies from OPEB plan employers. Contributions made by the employers are considered on a percentage of payroll basis, similar to the pension systems. The ARC is calculated as a percent of the covered payroll. Note that the State's current ARC is \$795,199,000. This represents 23.79% of current annual payroll for all eligible members.

The unfunded liability as a percentage of covered payroll is a measure of the relative magnitude of the unfunded liability. The table below shows that the State's unfunded liability is 209.83% of the State's total covered annual payroll. In other words, if 209.83% of this year's payroll were contributed to fund the subsidies, all accrued subsidies would be fully funded.

ARC and Unfunded Liability as a Percentage of Covered Payroll	
	<i>(in thousands)</i>
FY 2009 ARC	338,166
FY 2008 Payroll	3,298,252
6/30/2008 Unfunded Liability	6,107,823
ARC as a % of Covered Payroll	10.25%
Unfunded Liability as a % of Covered Payroll	185.18%
FY 2010 ARC	795,199
FY 2009 Payroll	3,342,136
6/30/2009 Unfunded Liability	7,012,826
ARC as a % of Covered Payroll	23.79%
Unfunded Liability as a % of Covered Payroll	209.83%
FY 2011 ARC	822,585
FY 2010 Payroll	3,482,983
6/30/2010 Unfunded Liability	7,631,766
ARC as a % of Covered Payroll	23.62%
Unfunded Liability as a % of Covered Payroll	219.12%

APPENDIX A

Actuarial Assumptions

Public Employees' Retirement System

<u>Age</u>	<u>Salary Scale</u>		<u>Ultimate Withdrawal</u>		<u>Retirement Rates</u>		<u>Mortality</u>	
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>
19	1.06000	1.06000	10.00%	11.00%	0.00%	0.00%	0.05%	0.02%
20	1.06000	1.06000	10.00%	11.00%	0.00%	0.00%	0.05%	0.03%
21	1.05950	1.05950	9.60%	10.80%	0.00%	0.00%	0.05%	0.03%
22	1.05900	1.05900	9.20%	10.60%	0.00%	0.00%	0.05%	0.03%
23	1.05850	1.05850	8.80%	10.40%	0.00%	0.00%	0.05%	0.03%
24	1.05800	1.05800	8.40%	10.20%	0.00%	0.00%	0.06%	0.03%
25	1.05750	1.05750	8.00%	10.00%	0.00%	0.00%	0.06%	0.03%
26	1.05700	1.05700	7.80%	9.60%	0.00%	0.00%	0.06%	0.04%
27	1.05650	1.05650	7.60%	9.20%	0.00%	0.00%	0.07%	0.04%
28	1.05600	1.05600	7.40%	8.80%	0.00%	0.00%	0.07%	0.04%
29	1.05550	1.05550	7.20%	8.40%	0.00%	0.00%	0.07%	0.04%
30	1.05500	1.05500	7.00%	8.00%	0.00%	0.00%	0.08%	0.05%
31	1.05450	1.05450	6.70%	7.50%	0.00%	0.00%	0.08%	0.05%
32	1.05400	1.05400	6.40%	7.00%	0.00%	0.00%	0.09%	0.05%
33	1.05350	1.05350	6.10%	6.50%	0.00%	0.00%	0.09%	0.06%
34	1.05300	1.05300	5.80%	6.00%	0.00%	0.00%	0.10%	0.06%
35	1.05250	1.05250	5.50%	5.50%	0.00%	0.00%	0.10%	0.07%
36	1.05200	1.05200	5.20%	5.30%	0.00%	0.00%	0.11%	0.07%
37	1.05150	1.05150	4.90%	5.10%	0.00%	0.00%	0.12%	0.08%
38	1.05100	1.05100	4.60%	4.90%	0.00%	0.00%	0.13%	0.08%
39	1.05050	1.05050	4.30%	4.70%	0.00%	0.00%	0.14%	0.09%
40	1.05000	1.05000	4.00%	4.50%	0.00%	0.00%	0.15%	0.09%
41	1.04975	1.04975	3.80%	4.40%	0.00%	0.00%	0.16%	0.10%
42	1.04950	1.04950	3.60%	4.30%	0.00%	0.00%	0.18%	0.11%
43	1.04925	1.04925	3.40%	4.20%	0.00%	0.00%	0.20%	0.12%
44	1.04900	1.04900	3.20%	4.10%	0.00%	0.00%	0.23%	0.13%
45	1.04875	1.04875	3.00%	4.00%	0.00%	0.00%	0.26%	0.14%
46	1.04850	1.04850	2.80%	3.90%	0.00%	0.00%	0.29%	0.15%
47	1.04825	1.04825	2.60%	3.80%	0.00%	0.00%	0.33%	0.17%
48	1.04800	1.04800	2.40%	3.70%	0.00%	0.00%	0.38%	0.18%
49	1.04775	1.04775	2.20%	3.60%	0.00%	0.00%	0.42%	0.20%
50	1.04750	1.04750	2.00%	3.50%	0.00%	0.00%	0.47%	0.22%
51	1.04700	1.04700	1.80%	3.20%	0.00%	0.00%	0.53%	0.23%
52	1.04650	1.04650	1.60%	2.90%	0.00%	0.00%	0.59%	0.25%
53	1.04600	1.04600	1.40%	2.60%	0.00%	0.00%	0.65%	0.27%
54	1.04550	1.04550	1.20%	2.30%	0.00%	0.00%	0.71%	0.30%
55	1.04500	1.04500	1.00%	2.00%	15.00%	15.00%	0.78%	0.33%

Public Employees' Retirement System

<u>Age</u>	<u>Salary Scale</u>		<u>Ultimate Withdrawal</u>		<u>Retirement Rates</u>		<u>Mortality</u>	
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>
56	1.04450	1.04450	1.00%	1.80%	15.00%	15.00%	0.85%	0.36%
57	1.04400	1.04400	1.00%	1.60%	15.00%	15.00%	0.93%	0.39%
58	1.04350	1.04350	1.00%	1.40%	15.00%	15.00%	1.00%	0.44%
59	1.04300	1.04300	1.00%	1.20%	15.00%	15.00%	1.09%	0.49%
60	1.04250	1.04250	1.00%	1.00%	15.00%	15.00%	1.19%	0.55%
61	1.04250	1.04250			15.00%	15.00%	1.31%	0.62%
62	1.04250	1.04250			35.00%	35.00%	1.44%	0.69%
63	1.04250	1.04250			18.00%	18.00%	1.59%	0.77%
64	1.04250	1.04250			18.00%	18.00%	1.74%	0.86%
65	1.04250	1.04250			30.00%	30.00%	1.92%	0.96%
66	1.04250	1.04250			20.00%	20.00%	2.13%	1.06%
67	1.04250	1.04250			20.00%	20.00%	2.36%	1.16%
68	1.04250	1.04250			20.00%	20.00%	2.63%	1.29%
69	1.04250	1.04250			20.00%	20.00%	2.92%	1.45%
70	1.04250	1.04250			100.00%	100.00%	3.24%	1.65%
71					100.00%	100.00%	3.61%	1.90%
72					100.00%	100.00%	4.00%	2.19%
73					100.00%	100.00%	4.38%	2.51%
74					100.00%	100.00%	4.75%	2.86%
75					100.00%	100.00%	5.12%	3.24%
76					100.00%	100.00%	5.53%	3.64%
77					100.00%	100.00%	6.01%	4.08%
78					100.00%	100.00%	6.59%	4.55%
79					100.00%	100.00%	7.26%	5.06%
80					100.00%	100.00%	7.97%	5.61%
81					100.00%	100.00%	8.74%	6.19%
82					100.00%	100.00%	9.54%	6.79%
83					100.00%	100.00%	10.37%	7.44%
84					100.00%	100.00%	11.23%	8.15%
85					100.00%	100.00%	12.11%	8.92%
86					100.00%	100.00%	13.01%	9.75%
87					100.00%	100.00%	13.93%	10.65%
88					100.00%	100.00%	14.87%	11.62%
89					100.00%	100.00%	15.85%	12.69%
90					100.00%	100.00%	16.87%	13.86%
91					100.00%	100.00%	17.95%	15.12%
92					100.00%	100.00%	19.05%	16.51%
93					100.00%	100.00%	20.17%	18.04%
94					100.00%	100.00%	21.30%	19.73%
95					100.00%	100.00%	22.65%	21.61%

Public Employees' Retirement System

<u>Age</u>	<u>Salary Scale</u>		<u>Ultimate Withdrawal</u>		<u>Retirement Rates</u>		<u>Mortality</u>	
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>
96					100.00%	100.00%	24.12%	23.70%
97					100.00%	100.00%	25.62%	25.81%
98					100.00%	100.00%	27.25%	28.02%
99					100.00%	100.00%	29.02%	30.47%
100					100.00%	100.00%	30.91%	33.16%
101							32.98%	36.14%
102							35.25%	39.42%
103							37.72%	43.04%
104							40.62%	47.15%
105							44.15%	51.92%
106							48.52%	57.50%
107							53.93%	64.03%
108							60.61%	71.69%
109							68.74%	80.63%
110							78.56%	100.00%
111							100.00%	100.00%

Teachers' Retirement System / Teachers Defined Contribution

<u>Age</u>	<u>Salary Scale</u>		<u>Ultimate Withdrawal</u>		<u>Retirement Rates</u>		<u>Mortality</u>	
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>
19	1.05000	1.05000	4.00%	4.00%	0.00%	0.00%	0.04%	0.02%
20	1.05000	1.05000	4.00%	4.00%	0.00%	0.00%	0.04%	0.02%
21	1.04950	1.04950	3.90%	3.90%	0.00%	0.00%	0.04%	0.02%
22	1.04900	1.04900	3.80%	3.80%	0.00%	0.00%	0.04%	0.02%
23	1.04850	1.04850	3.70%	3.70%	0.00%	0.00%	0.04%	0.02%
24	1.04800	1.04800	3.60%	3.60%	0.00%	0.00%	0.04%	0.03%
25	1.04750	1.04750	3.50%	3.50%	0.00%	0.00%	0.05%	0.03%
26	1.04700	1.04700	3.40%	3.40%	0.00%	0.00%	0.05%	0.03%
27	1.04650	1.04650	3.30%	3.30%	0.00%	0.00%	0.05%	0.03%
28	1.04600	1.04600	3.20%	3.20%	0.00%	0.00%	0.05%	0.03%
29	1.04550	1.04550	3.10%	3.10%	0.00%	0.00%	0.06%	0.03%
30	1.04500	1.04500	3.00%	3.00%	0.00%	0.00%	0.06%	0.04%
31	1.04450	1.04450	2.95%	2.90%	0.00%	0.00%	0.06%	0.04%
32	1.04400	1.04400	2.90%	2.80%	0.00%	0.00%	0.07%	0.04%
33	1.04350	1.04350	2.85%	2.70%	0.00%	0.00%	0.07%	0.04%
34	1.04300	1.04300	2.80%	2.60%	0.00%	0.00%	0.08%	0.05%
35	1.04250	1.04250	2.75%	2.50%	0.00%	0.00%	0.09%	0.05%
36	1.04200	1.04200	2.68%	2.40%	0.00%	0.00%	0.09%	0.05%
37	1.04150	1.04150	2.60%	2.30%	0.00%	0.00%	0.10%	0.06%
38	1.04100	1.04100	2.53%	2.20%	0.00%	0.00%	0.10%	0.06%
39	1.04050	1.04050	2.45%	2.10%	0.00%	0.00%	0.11%	0.07%
40	1.04000	1.04000	2.38%	2.00%	0.00%	0.00%	0.12%	0.07%
41	1.03960	1.03960	2.30%	1.90%	0.00%	0.00%	0.14%	0.08%
42	1.03920	1.03920	2.23%	1.80%	0.00%	0.00%	0.15%	0.08%
43	1.03880	1.03880	2.15%	1.70%	0.00%	0.00%	0.17%	0.09%
44	1.03840	1.03840	2.08%	1.60%	0.00%	0.00%	0.19%	0.10%
45	1.03800	1.03800	2.00%	1.50%	0.00%	0.00%	0.22%	0.11%
46	1.03760	1.03760	1.90%	1.40%	0.00%	0.00%	0.25%	0.12%
47	1.03720	1.03720	1.80%	1.30%	0.00%	0.00%	0.28%	0.14%
48	1.03680	1.03680	1.70%	1.20%	0.00%	0.00%	0.31%	0.15%
49	1.03640	1.03640	1.60%	1.10%	0.00%	0.00%	0.35%	0.16%
50	1.03600	1.03600	1.50%	1.00%	0.00%	0.00%	0.39%	0.18%
51	1.03600	1.03600	1.60%	1.10%	0.00%	0.00%	0.43%	0.19%
52	1.03600	1.03600	1.70%	1.20%	0.00%	0.00%	0.48%	0.21%
53	1.03600	1.03600	1.80%	1.30%	0.00%	0.00%	0.52%	0.23%
54	1.03600	1.03600	1.90%	1.40%	0.00%	0.00%	0.57%	0.25%
55	1.03600	1.03600	2.00%	1.50%	25.00%	22.50%	0.61%	0.28%

Teachers' Retirement System / Teachers Defined Contribution

<u>Age</u>	<u>Salary Scale</u>		<u>Ultimate Withdrawal</u>		<u>Retirement Rates</u>		<u>Mortality</u>	
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>
56	1.03600	1.03600	2.00%	1.50%	15.00%	17.50%	0.66%	0.31%
57	1.03600	1.03600	2.00%	1.50%	15.00%	17.50%	0.71%	0.34%
58	1.03600	1.03600	2.00%	1.50%	15.00%	17.50%	0.77%	0.38%
59	1.03600	1.03600	2.00%	1.50%	15.00%	17.50%	0.84%	0.42%
60	1.03600	1.03600	2.00%	1.50%	30.00%	25.00%	0.92%	0.47%
61	1.03600	1.03600	2.00%	1.50%	35.00%	20.00%	1.01%	0.52%
62	1.03600	1.03600	2.00%	1.50%	40.00%	25.00%	1.11%	0.58%
63	1.03600	1.03600	2.00%	1.50%	25.00%	20.00%	1.24%	0.64%
64	1.03600	1.03600	2.00%	1.50%	25.00%	25.00%	1.39%	0.71%
65	1.03600	1.03600	2.00%	1.50%	40.00%	30.00%	1.56%	0.78%
66	1.03580	1.03580	2.00%	1.50%	30.00%	30.00%	1.76%	0.87%
67	1.03560	1.03560	2.00%	1.50%	30.00%	30.00%	1.98%	0.97%
68	1.03540	1.03540	2.00%	1.50%	30.00%	30.00%	2.22%	1.09%
69	1.03520	1.03520	2.00%	1.50%	30.00%	30.00%	2.48%	1.24%
70	1.03500	1.03500			100.00%	100.00%	2.75%	1.41%
71					100.00%	100.00%	3.04%	1.62%
72					100.00%	100.00%	3.34%	1.85%
73					100.00%	100.00%	3.67%	2.11%
74					100.00%	100.00%	4.04%	2.40%
75					100.00%	100.00%	4.46%	2.72%
76					100.00%	100.00%	4.94%	3.07%
77					100.00%	100.00%	5.48%	3.45%
78					100.00%	100.00%	6.07%	3.85%
79					100.00%	100.00%	6.71%	4.29%
80					100.00%	100.00%	7.41%	4.77%
81					100.00%	100.00%	8.15%	5.27%
82					100.00%	100.00%	8.93%	5.81%
83					100.00%	100.00%	9.75%	6.38%
84					100.00%	100.00%	10.60%	6.99%
85					100.00%	100.00%	11.48%	7.66%
86					100.00%	100.00%	12.42%	8.39%
87					100.00%	100.00%	13.39%	9.19%
88					100.00%	100.00%	14.41%	10.14%
89					100.00%	100.00%	15.49%	11.18%
90					100.00%	100.00%	16.63%	12.31%
91					100.00%	100.00%	17.82%	13.56%
92					100.00%	100.00%	19.05%	14.96%
93					100.00%	100.00%	20.30%	16.51%
94					100.00%	100.00%	21.79%	18.24%
95					100.00%	100.00%	23.41%	20.18%

Teachers' Retirement System / Teachers Defined Contribution

<u>Age</u>	<u>Salary Scale</u>		<u>Ultimate Withdrawal</u>		<u>Retirement Rates</u>		<u>Mortality</u>	
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>
96					100.00%	100.00%	24.84%	22.20%
97					100.00%	100.00%	26.40%	24.39%
98					100.00%	100.00%	28.08%	26.82%
99					100.00%	100.00%	29.92%	29.52%
100					100.00%	100.00%	31.92%	32.52%
101							34.11%	35.89%
102							36.51%	39.58%
103							39.31%	43.84%
104							42.73%	48.78%
105							46.95%	54.59%
106							52.19%	61.43%
107							58.65%	69.49%
108							66.53%	78.95%
109							76.02%	100.00%
110							100.00%	100.00%

APPENDIX B

Pension Plan Benefits

Public Employees' Retirement System

Normal Retirement Benefit

Eligibility: A member who has attained age 60 and has earned five or more years of contributing service is eligible for a normal retirement benefit.

Benefit Amount: The annual normal retirement benefit, payable in monthly installments, is equal to 2% of the member's final average salary *times* the number of years of his credited service.

Normal Form of Benefit: The normal form of the retirement benefit is a single life cash refund annuity. This means that the pension is payable only during the member's lifetime, but if he dies before receiving pension payments which total the amount of his accumulated contributions (with interest) at the time of his retirement, then the difference will be paid to his beneficiary.

Optional Forms of Benefit: The retiring member may instead of the "Normal Form" choose an actuarially reduced joint and survivor annuity with his or her spouse as beneficiary, with either 100% or 50% of the amount payable while both are alive continuing to the surviving spouse during the spouse's remaining lifetime. This is a contingent joint and survivor annuity, reducing in amount only upon the retiree's dying first (and not upon the spouse's death).

Early Retirement Benefit (Unreduced)

Eligibility: Rule of 80; A member who has completed at least five years of contributing service and who has attained age 55 with the sum of his age *plus* years of contributing service equal to or greater than 80, may retire at any age over 55.

Benefit Amount: The early retirement benefit is equal to the members normal retirement benefit based on final average salary and years of credited service as of early retirement date, without reduction for early commencement. The early retirement benefit is payable in monthly installments under the same normal or optional forms as the normal retirement benefit.

Early Retirement Benefit (Reduced)

Eligibility: A terminating member who has completed at least five years of contributing service and who either (i) has attained age 55 and completed 10 years of credited service, or (ii) has completed 20 years of credited service, may elect to have his deferred vested benefit commence on the first of any month following his 55th birthday. A terminating member with 30 years of credited service, at least three of which are contributing service, may retire early at any age.

Benefit Amount: The early retirement benefit is equal to the normal retirement benefit based on final average salary and years of credited service as of early retirement date reduced by ½% per month (6% per year) that the early retirement benefit commencement date precedes the retiring member's 62nd birthday. A member retiring after 30 years of service receives a benefit actuarially

reduced for the number of years by which his early retirement precedes age 60. In this case, a different scale of early retirement reduction factors applies to the formula benefit. The early retirement benefit is payable in monthly installments under the same normal or optional forms as the normal retirement benefit.

Teachers' Retirement System

Plan Name: The State Teachers' Retirement System

Member: Membership includes any employee hired before July 1, 1991 in the public schools, state institutions of higher education, certain state departments, and the Board of Regents. Members of the Teacher's Defined Contribution ("TDC") Plan or TIAA-CREF are not eligible for TRS.

Final Average Salary: Final Average Salary is the average of the Member's 5 highest fiscal years of total earnings from covered employment during the Member's last 15 years of service.

Service Retirement

Eligibility: A Member may retire with an unreduced pension (1) at any age with 35 years of Credited Service, or (2) at age 60 with 5 years of Credited Service. A member may retire with 30 years of Credited Service at any age, with the pension reduced actuarially if the Member retires before age 55.

Benefit Amount: The normal form of benefit is a single life annuity paid monthly, in an amount equal to 2% of Final Average Salary times years of Credited Service. Other forms of benefit may be elected, subject to actuarial reduction, including a Cash Refund Annuity, 50% or 100% Contingent Joint and Survivor Annuities, and a 10 Year Certain and Life Annuity.

Pre-Retirement Death Benefits

Eligibility: The surviving spouse of a deceased Member who had attained age 50 and completed 25 years of Credited Service is eligible for the Surviving Spouse Benefit. If a member dies prior to attaining age 50 or completing 25 years of Credited Service a Lump Sum Death Benefit is payable to the beneficiary.

Benefit Amount:

- **Surviving Spouse Benefit:** The surviving spouse receives an annuity payable as if the Member had retired on the date of death with a 100% Joint and Survivor pension.
- **Lump Sum Death Benefit:** The sum of the accumulated Member and employer contributions with interest is paid to the Member's beneficiary (or estate).

Refund of Contributions

Eligibility: A Member who leaves employment and is not eligible for any other benefit will receive a refund of his or her contributions to the retirement system.

Benefit Amount: A lump sum of the Member's accumulated contributions, with compound interest computed on any contributed amount from the end of the fiscal year in which contributed to the date

of distribution of the lump sum (but in no case beyond 5 years after the end of the fiscal year during which the Member left service). For purposes of this benefit, interest is computed at a 3% annual rate.

Trooper Plan A

Plan Name: The West Virginia Public Safety Death, Disability and Retirement Fund.

Plan Membership: West Virginia state police officers hired before March 12, 1994 participate in this plan.

Unused Sick or Annual Leave: A retiring member may at his option convert unused sick and/or annual leave to pension service credit at the rate of two days of service credited per day of unused leave. After doubling, 260 unused leave days are counted as one year of credited service. Such service counts for the purpose of increasing the member's benefit, but it does not count for determining eligibility for benefits.

Normal Retirement Benefit

Eligibility: A member who has attained age 50 and has earned 20 or more years of contributory service, or is any age and has earned 25 or more years of contributory and military service, is eligible for a normal retirement benefit.

Benefit Amount: The annual normal retirement benefit, payable in monthly installments, is equal to 5½% of the member's Career Pay, subject to minimum annual benefit of \$6,000.

Normal Form of Benefit: The normal form of the retirement benefit is a life annuity with 75% of the amount payable continuing to the member's surviving spouse after the death of the member, for the spouse's remaining lifetime.

Deferred Vested Benefit

Eligibility: A terminating member who has completed ten years of contributory service and who does not withdraw his accumulated contributions is entitled to a deferred vested benefit commencing at age 62.

Benefit Amount: The deferred vested annual pension, payable in monthly installments, is equal to 5½% of the member's Career Pay, subject to a minimum annual benefit of \$6,000. It is payable in the same normal form as the normal retirement benefit would be or alternatively, the member may elect to receive an actuarially reduced joint and survivor annuity with 50% of the amount payable while both are alive continuing to the surviving spouse during the spouse's remaining lifetime.

Pre-retirement Death Benefits

Eligibility: The surviving spouse of a member who dies from duty-related causes, or in some cases surviving children or dependent parents, is eligible for a survivor's pension. If death is unrelated to his duties as a state trooper, the surviving family is eligible for a nonduty-related pension. In the nonduty case the benefits payable depend on whether or not the deceased trooper had 20 years of service.

Benefit Amount:

- Duty-Related Death

- ***To the surviving spouse:*** An annual annuity (payable monthly) equal to 5.5% of the aggregate salary the member would have received had he remained in employment for 25 years (based on average earnings of the department), or the member's actual career pay, including non contributory service credit, if greater.
- ***To surviving dependent children:*** If no spouse survives, each surviving child receives 25% of what would have been a surviving spouse's entitlement. Each child is also eligible for an academic scholarship to West Virginia schools, paying up to \$7,500.
- ***To surviving dependent parents:*** If there is no surviving spouse or children, then each surviving dependent parent of the deceased member will receive one-half of what would have been a surviving spouse's entitlement.

- Nonduty-Related Death before Completing 20 Years of Service

- ***To the surviving spouse:*** An annual annuity (payable monthly) equal to 2.75% of the aggregate salary the member would have received had he remained in employment for 25 years (based on average earnings of the department).
- ***To surviving dependent children:*** If there is no surviving spouse, or the spouse remarries, each surviving child receives 25% of what would have been the spouse's entitlement. Such children are not eligible for scholarships from the retirement fund.
- ***To surviving dependent parents:*** If there is no surviving spouse or children, then each surviving dependent parent of the deceased member will receive one-half of what would have been a surviving spouse's entitlement.

- Nonduty-Related Death after Completing 20 Years of Service

- ***To the surviving spouse:*** A monthly life annuity equal to 75% of the member's Normal Retirement Benefit, but not less than \$5,00 annually. The spouse also receives \$100 monthly for each dependent child. These benefits cease when the spouse remarries.
- ***To surviving dependent children:*** If there is no surviving spouse, or the spouse remarries, each surviving child receives 25% of what would have been the spouse's entitlement. Such children are not eligible for scholarships from the retirement fund.
- ***To surviving dependent parents:*** If there is no surviving spouse or children, then each surviving dependent parent of the deceased member will receive one-half of what would have been a surviving spouse's entitlement.

Trooper Plan B

Plan Name: The West Virginia State Police Retirement System

Effective Date: Plan created on March 12, 1994 under §15-2A of West Virginia Code.

Plan Membership: West Virginia state police employed after the effective date.

Unused Sick or Annual Leave: A retiring member may at his option convert unused sick and/or annual leave to pension service credit at the rate of two days of service credited per day of unused leave. After doubling, 260 unused leave days are counted as one year of credited service. Such service counts for the purpose of increasing the member's benefit, but it does not count for determining eligibility for benefits.

Normal Retirement Benefit

Eligibility: A member who has attained age 50 and has earned 25 or more years of contributory service is eligible for a normal retirement benefit.

Benefit Amount: The annual normal retirement benefit, payable in monthly installments, is equal to 2.75% of the member's final average salary times the number of years of service.

Normal Form of Benefit: The normal form of the retirement benefit is a life annuity with 66-2/3% of the amount payable continuing to the member's surviving spouse after the death of the member, for the spouse's remaining lifetime, or until remarriage.

Optional Forms of Benefit: The retiring member may choose an actuarially reduced joint and survivor annuity with his or her spouse as beneficiary, increasing the amount payable to the surviving spouse for the spouse's remaining lifetime after the death of the member above the 66-2/3% level.

Deferred Vested Benefit

Eligibility: A terminating member who has completed ten years of contributory service and who does not withdraw his accumulated contributions, is entitled to a deferred vested benefit commencing at age 62.

Benefit Amount: The deferred vested annual pension, payable in monthly installments, is equal to 2.75% of the member's final average salary times his years of service. It is payable in the same form as the normal retirement benefit would be or alternatively, the member may elect to receive an actuarially reduced joint and survivor annuity with 50% of the amount payable while both are alive continuing to the surviving spouse during the spouse's remaining lifetime.

Early Retirement Benefits

Eligibility: A member who has earned 20 or more years of contributory service, may retire early at any age.

Benefit Amount: The early retirement benefit is payable in monthly installments under the same normal or optional forms as the normal retirement benefit. It is equal to the deferred benefit actuarially reduced for the number of years by which his early retirement precedes age 52.

Pre-retirement Death Benefits

Eligibility: The surviving spouse, or in some cases surviving children or dependent parents, of a member who dies from duty-related causes, is eligible for a survivor's pension. If death is unrelated to his duties as a state trooper, the surviving family is eligible for a nonduty-related pension. In the nonduty case the benefits payable depend on whether or not the deceased trooper had 20 years of service.

Benefit Amount:

- Duty-Related Death

- ***To the surviving spouse:*** A monthly annuity to the surviving spouse equal to two-thirds (2/3) of the member's base salary. The surviving spouse also receives \$100 monthly for each dependent child. These benefits continue even after the surviving spouse remarries.
- ***To surviving dependent children:*** If no spouse survives, each surviving child receives 25% of what would have been a surviving spouse's entitlement. Each child is also eligible for an academic scholarship to West Virginia schools, paying up to \$7,500.
- ***To surviving dependent parents:*** If there is no surviving spouse or children, then each surviving dependent parent of the deceased member will receive one-half of what would have been a surviving spouse's entitlement.

- Nonduty-related Death after Completing 20 Years of Service

- ***To the surviving spouse:*** A monthly life annuity equal to two-thirds (2/3) of the member's Normal Retirement Benefit, but not less than \$5,000 annually. The spouse also receives \$100 monthly for each dependent child. These benefits cease upon marriage.
- ***To surviving dependent children:*** If there is no surviving spouse, or the spouse remarries, each surviving child receives 25% of what would have been the spouse's entitlement. Such children are not eligible for scholarships from the retirement fund.
- ***To surviving dependent parents:*** If there is no surviving spouse or children, then each surviving dependent parent of the deceased member will receive one-half of what would have been a surviving spouse's entitlement.

Postretirement Death Benefits

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

APPENDIX C
Public Employee Leave Analysis
Sick Leave and Demographic Information as of 6-30-2009 (All Employees)

AGE	SALARY	SICK LEAVE (in Days)									TOTAL EMPLOYEES	TOTAL SICK DAYS	AVERAGE SICK LEAVE
		0-60	61-120	121-180	181-240	241-300	301-360	361-420	421-480	481+			
0-19	0-20,000	0	0	0	0	0	0	0	0	0	0	0	0
	20,001-30,000	0	0	0	0	0	0	0	0	0	0	0	0
	30,001-40,000	0	0	0	0	0	0	0	0	0	0	0	0
	40,001-50,000	0	0	0	0	0	0	0	0	0	0	0	0
	50,001+	0	0	0	0	0	0	0	0	0	0	0	0
	Subtotal	0	0	0	0	0	0	0	0	0	0	0	0
20-24	0-20,000	0	0	0	0	0	0	0	0	0	0	0	0
	20,001-30,000	0	0	0	0	0	0	0	0	0	0	0	0
	30,001-40,000	0	0	0	0	0	0	0	0	0	0	0	0
	40,001-50,000	0	0	0	0	0	0	0	0	0	0	0	0
	50,001+	0	0	0	0	0	0	0	0	0	0	0	0
	Subtotal	0	0	0	0	0	0	0	0	0	0	0	0
25-29	0-20,000	1	1	0	0	0	0	0	0	0	2	129	64
	20,001-30,000	20	7	0	0	0	0	0	0	0	27	996	37
	30,001-40,000	11	2	0	1	0	0	0	0	0	14	581	42
	40,001-50,000	5	1	0	0	0	0	0	0	0	6	178	30
	50,001+	1	1	0	0	0	0	0	0	0	2	121	60
	Subtotal	38	12	0	1	0	0	0	0	0	51	2,005	39
30-34	0-20,000	11	6	1	0	0	0	0	0	0	18	756	42
	20,001-30,000	177	60	19	2	0	0	0	0	0	258	12,050	47
	30,001-40,000	327	94	28	3	1	0	0	0	0	453	18,322	40
	40,001-50,000	350	122	42	3	0	0	0	0	0	517	24,626	48
	50,001+	61	45	24	4	0	0	0	0	0	134	10,069	75
	Subtotal	926	327	114	12	1	0	0	0	0	1,380	65,823	48
35-39	0-20,000	358	8	0	0	0	0	0	0	0	366	11,434	31
	20,001-30,000	454	120	54	8	2	0	0	0	0	638	28,307	44
	30,001-40,000	548	209	115	37	8	0	0	0	0	917	55,465	60
	40,001-50,000	826	310	140	37	10	0	0	0	0	1,323	74,957	57
	50,001+	167	168	107	78	34	2	0	0	0	556	60,737	109
	Subtotal	2,353	815	416	160	54	2	0	0	0	3,800	230,900	61
40-44	0-20,000	441	12	5	1	0	0	0	0	0	459	23,407	51
	20,001-30,000	654	211	87	31	16	0	0	0	0	999	54,069	54
	30,001-40,000	590	232	148	77	35	7	2	0	0	1,091	81,978	75
	40,001-50,000	866	427	209	92	29	14	1	1	0	1,639	118,889	73
	50,001+	352	223	213	139	90	37	9	0	0	1,063	128,470	121
	Subtotal	2,903	1,105	662	340	170	58	12	1	0	5,251	406,813	77
45-49	0-20,000	222	284	6	1	0	0	0	1	1	515	33,735	66
	20,001-30,000	891	388	197	74	27	20	10	3	1	1,611	114,723	71
	30,001-40,000	615	286	224	149	92	44	30	5	0	1,445	156,671	108
	40,001-50,000	752	441	291	170	84	49	26	6	2	1,821	186,528	102
	50,001+	535	389	404	295	182	103	44	15	2	1,969	275,222	140
	Subtotal	3,015	1,788	1,122	689	385	216	110	30	6	7,361	766,879	104

APPENDIX C
Public Employee Leave Analysis
Sick Leave and Demographic Information as of 6-30-2009 (All Employees)

AGE	SALARY	SICK LEAVE (in Days)									TOTAL EMPLOYEES	TOTAL SICK DAYS	AVERAGE SICK LEAVE
		0-60	61-120	121-180	181-240	241-300	301-360	361-420	421-480	481+			
50-54	0-20,000	85	514	10	2	2	0	0	0	1	614	59,068	96
	20,001-30,000	1,093	546	315	118	53	39	15	10	3	2,192	178,303	81
	30,001-40,000	742	440	288	267	176	118	66	36	11	2,144	287,289	134
	40,001-50,000	693	388	319	219	145	82	64	36	9	1,955	253,899	130
	50,001+	844	578	659	570	456	289	150	63	25	3,634	604,227	166
	Subtotal	3,457	2,466	1,591	1,176	832	528	295	145	49	10,539	1,382,787	131
55-59	0-20,000	66	423	282	4	0	4	0	0	0	779	96,393	124
	20,001-30,000	1,007	531	314	164	84	42	13	11	9	2,175	199,571	92
	30,001-40,000	666	390	340	304	183	123	73	34	36	2,149	314,884	147
	40,001-50,000	556	360	288	197	133	87	61	45	59	1,786	268,148	150
	50,001+	1,002	616	734	811	661	464	309	188	128	4,913	956,147	195
	Subtotal	3,297	2,320	1,958	1,480	1,061	720	456	278	232	11,802	1,835,143	155
60-64	0-20,000	59	248	357	2	2	1	2	0	0	671	87,208	130
	20,001-30,000	508	318	226	108	59	20	11	9	4	1,263	127,115	101
	30,001-40,000	338	250	203	187	142	68	55	29	42	1,314	216,031	164
	40,001-50,000	232	163	141	129	85	47	34	32	34	897	152,349	170
	50,001+	528	268	340	336	279	252	160	147	159	2,469	526,830	213
	Subtotal	1,665	1,247	1,267	762	567	388	262	217	239	6,614	1,109,533	168
65-69	0-20,000	31	200	4	2	2	0	0	0	0	239	25,784	108
	20,001-30,000	128	80	71	35	14	7	4	1	2	342	36,893	108
	30,001-40,000	65	49	41	30	42	27	18	1	12	285	52,075	183
	40,001-50,000	46	25	24	14	17	7	13	8	8	162	29,247	181
	50,001+	182	36	63	40	36	41	25	26	55	504	97,332	193
	Subtotal	452	390	203	121	111	82	60	36	77	1,532	241,330	158
70+	0-20,000	17	59	38	7	4	0	0	0	0	125	15,413	123
	20,001-30,000	50	27	19	17	7	2	3	1	4	130	16,147	124
	30,001-40,000	23	18	14	15	10	15	9	4	7	115	23,780	207
	40,001-50,000	14	3	9	6	2	6	3	5	9	57	14,183	249
	50,001+	59	11	8	9	14	10	12	9	30	162	37,248	230
	Subtotal	163	118	88	54	37	33	27	19	50	589	106,773	181
All	0-20,000	1,291	1,755	703	19	10	5	2	1	2	3,788	353,329	93
	20,001-30,000	4,982	2,288	1,302	557	262	130	56	35	23	9,635	768,175	80
	30,001-40,000	3,925	1,970	1,401	1,070	689	402	253	109	108	9,927	1,207,076	122
	40,001-50,000	4,340	2,240	1,463	867	505	292	202	133	121	10,163	1,123,005	110
	50,001+	3,731	2,335	2,552	2,282	1,752	1,198	709	448	399	15,406	2,696,402	175
	Total	18,269	10,588	7,421	4,795	3,218	2,027	1,222	726	653	48,919	6,147,987	126

APPENDIX C
Public Employee Leave Analysis
Sick Leave and Demographic Information as of 6-30-2009 (Service Before 7/1/1988)

AGE	SALARY	SICK LEAVE (in Days)									TOTAL EMPLOYEES	TOTAL SICK DAYS	AVERAGE SICK LEAVE
		0-60	61-120	121-180	181-240	241-300	301-360	361-420	421-480	481+			
0-19	0-20,000	0	0	0	0	0	0	0	0	0	0	0	0
	20,001-30,000	0	0	0	0	0	0	0	0	0	0	0	0
	30,001-40,000	0	0	0	0	0	0	0	0	0	0	0	0
	40,001-50,000	0	0	0	0	0	0	0	0	0	0	0	0
	50,001+	0	0	0	0	0	0	0	0	0	0	0	0
	Subtotal	0	0	0	0	0	0	0	0	0	0	0	0
20-24	0-20,000	0	0	0	0	0	0	0	0	0	0	0	0
	20,001-30,000	0	0	0	0	0	0	0	0	0	0	0	0
	30,001-40,000	0	0	0	0	0	0	0	0	0	0	0	0
	40,001-50,000	0	0	0	0	0	0	0	0	0	0	0	0
	50,001+	0	0	0	0	0	0	0	0	0	0	0	0
	Subtotal	0	0	0	0	0	0	0	0	0	0	0	0
25-29	0-20,000	0	0	0	0	0	0	0	0	0	0	0	0
	20,001-30,000	0	0	0	0	0	0	0	0	0	0	0	0
	30,001-40,000	0	0	0	0	0	0	0	0	0	0	0	0
	40,001-50,000	0	0	0	0	0	0	0	0	0	0	0	0
	50,001+	0	0	0	0	0	0	0	0	0	0	0	0
	Subtotal	0	0	0	0	0	0	0	0	0	0	0	0
30-34	0-20,000	0	0	0	0	0	0	0	0	0	0	0	0
	20,001-30,000	0	0	0	0	0	0	0	0	0	0	0	0
	30,001-40,000	0	0	0	0	0	0	0	0	0	0	0	0
	40,001-50,000	0	0	0	0	0	0	0	0	0	0	0	0
	50,001+	0	0	0	0	0	0	0	0	0	0	0	0
	Subtotal	0	0	0	0	0	0	0	0	0	0	0	0
35-39	0-20,000	0	0	0	0	0	0	0	0	0	0	0	0
	20,001-30,000	0	0	0	0	0	0	0	0	0	0	0	0
	30,001-40,000	0	0	0	0	0	0	0	0	0	0	0	0
	40,001-50,000	0	0	0	0	0	0	0	0	0	0	0	0
	50,001+	0	0	0	0	0	0	0	0	0	0	0	0
	Subtotal	0	0	0	0	0	0	0	0	0	0	0	0
40-44	0-20,000	1	0	1	0	0	0	0	0	0	2	147	74
	20,001-30,000	12	3	7	2	6	0	0	0	0	30	3,586	120
	30,001-40,000	33	14	18	10	14	3	1	0	0	93	11,617	125
	40,001-50,000	41	35	22	16	6	3	1	1	0	125	14,250	114
	50,001+	34	28	34	23	15	5	5	0	0	144	20,727	144
	Subtotal	121	80	82	51	41	11	7	1	0	394	50,327	128
45-49	0-20,000	6	1	3	0	0	0	0	1	0	11	1,029	94
	20,001-30,000	85	30	32	27	20	19	10	3	1	227	32,019	141
	30,001-40,000	155	79	74	68	58	34	29	4	0	501	75,708	151
	40,001-50,000	269	155	147	105	59	36	25	6	2	804	105,341	131
	50,001+	308	256	263	203	138	88	40	15	2	1,313	200,695	153
	Subtotal	823	521	519	403	275	177	104	29	5	2,856	414,792	145

APPENDIX C
Public Employee Leave Analysis
Sick Leave and Demographic Information as of 6-30-2009 (Service Before 7/1/1988)

AGE	SALARY	SICK LEAVE (in Days)									TOTAL EMPLOYEES	TOTAL SICK DAYS	AVERAGE SICK LEAVE
		0-60	61-120	121-180	181-240	241-300	301-360	361-420	421-480	481+			
50-54	0-20,000	8	236	2	2	0	0	0	0	1	249	29,624	119
	20,001-30,000	177	83	94	63	39	35	15	10	3	519	70,957	137
	30,001-40,000	315	184	151	176	139	105	66	36	10	1,182	201,812	171
	40,001-50,000	261	139	181	148	118	71	64	36	9	1,027	176,468	172
	50,001+	615	447	514	477	404	269	148	60	25	2,959	525,099	177
	Subtotal	1,376	1,089	942	866	700	480	293	142	48	5,936	1,003,960	169
55-59	0-20,000	10	404	275	0	0	4	0	0	0	693	92,081	133
	20,001-30,000	189	116	102	94	68	39	12	10	9	639	93,826	147
	30,001-40,000	283	176	189	193	147	110	72	33	35	1,238	227,507	184
	40,001-50,000	223	136	131	145	105	79	61	45	58	983	195,909	199
	50,001+	784	496	602	727	608	445	308	187	127	4,284	882,667	206
	Subtotal	1,489	1,328	1,299	1,159	928	677	453	275	229	7,837	1,491,988	190
60-64	0-20,000	12	230	351	1	1	1	1	0	0	597	82,904	139
	20,001-30,000	118	72	79	39	43	17	10	9	4	391	56,039	143
	30,001-40,000	162	106	101	119	112	60	55	26	41	782	158,103	202
	40,001-50,000	90	59	70	80	63	41	34	32	34	503	111,543	222
	50,001+	413	209	271	288	248	234	160	144	159	2,126	483,693	228
	Subtotal	795	676	872	527	467	353	260	211	238	4,399	892,281	203
65-69	0-20,000	4	186	1	1	1	0	0	0	0	193	22,978	119
	20,001-30,000	20	11	17	20	12	6	4	1	2	93	16,463	177
	30,001-40,000	26	21	18	15	36	24	18	1	12	171	39,533	231
	40,001-50,000	19	10	14	10	15	5	13	8	8	102	23,894	234
	50,001+	137	29	37	30	23	37	25	26	53	397	84,564	213
	Subtotal	206	257	87	76	87	72	60	36	75	956	187,433	196
70+	0-20,000	2	49	34	4	2	0	0	0	0	91	12,498	137
	20,001-30,000	19	5	6	8	3	1	3	1	4	50	8,215	164
	30,001-40,000	12	5	10	8	8	12	9	4	7	75	18,880	252
	40,001-50,000	7	2	3	3	2	6	3	5	9	40	12,371	309
	50,001+	49	6	4	7	13	9	12	9	30	139	35,069	252
	Subtotal	89	67	57	30	28	28	27	19	50	395	87,033	220
All	0-20,000	43	1,106	667	8	4	5	1	1	1	1,836	241,259	131
	20,001-30,000	620	320	337	253	191	117	54	34	23	1,949	281,105	144
	30,001-40,000	986	585	561	589	514	348	250	104	105	4,042	733,160	181
	40,001-50,000	910	536	568	507	368	241	201	133	120	3,584	639,775	179
	50,001+	2,340	1,471	1,725	1,755	1,449	1,087	698	441	396	11,362	2,232,514	196
	Total	4,899	4,018	3,858	3,112	2,526	1,798	1,204	713	645	22,773	4,127,814	181

APPENDIX C
Public Employee Leave Analysis
Sick Leave and Demographic Information as of 6-30-2009 (Service Between 7/1/1988 and 6/30/2001)

AGE	SALARY	SICK LEAVE (in Days)									TOTAL EMPLOYEES	TOTAL SICK DAYS	AVERAGE SICK LEAVE
		0-60	61-120	121-180	181-240	241-300	301-360	361-420	421-480	481+			
0-19	0-20,000	0	0	0	0	0	0	0	0	0	0	0	0
	20,001-30,000	0	0	0	0	0	0	0	0	0	0	0	0
	30,001-40,000	0	0	0	0	0	0	0	0	0	0	0	0
	40,001-50,000	0	0	0	0	0	0	0	0	0	0	0	0
	50,001+	0	0	0	0	0	0	0	0	0	0	0	0
	Subtotal	0	0	0	0	0	0	0	0	0	0	0	0
20-24	0-20,000	0	0	0	0	0	0	0	0	0	0	0	0
	20,001-30,000	0	0	0	0	0	0	0	0	0	0	0	0
	30,001-40,000	0	0	0	0	0	0	0	0	0	0	0	0
	40,001-50,000	0	0	0	0	0	0	0	0	0	0	0	0
	50,001+	0	0	0	0	0	0	0	0	0	0	0	0
	Subtotal	0	0	0	0	0	0	0	0	0	0	0	0
25-29	0-20,000	1	1	0	0	0	0	0	0	0	2	129	64
	20,001-30,000	20	7	0	0	0	0	0	0	0	27	996	37
	30,001-40,000	11	2	0	1	0	0	0	0	0	14	581	42
	40,001-50,000	5	1	0	0	0	0	0	0	0	6	178	30
	50,001+	1	1	0	0	0	0	0	0	0	2	121	60
	Subtotal	38	12	0	1	0	0	0	0	0	51	2,005	39
30-34	0-20,000	11	6	1	0	0	0	0	0	0	18	756	42
	20,001-30,000	177	60	19	2	0	0	0	0	0	258	12,050	47
	30,001-40,000	327	94	28	3	1	0	0	0	0	453	18,322	40
	40,001-50,000	350	122	42	3	0	0	0	0	0	517	24,626	48
	50,001+	61	45	24	4	0	0	0	0	0	134	10,069	75
	Subtotal	926	327	114	12	1	0	0	0	0	1,380	65,823	48
35-39	0-20,000	358	8	0	0	0	0	0	0	0	366	11,434	31
	20,001-30,000	454	120	54	8	2	0	0	0	0	638	28,307	44
	30,001-40,000	548	209	115	37	8	0	0	0	0	917	55,465	60
	40,001-50,000	826	310	140	37	10	0	0	0	0	1,323	74,957	57
	50,001+	167	168	107	78	34	2	0	0	0	556	60,737	109
	Subtotal	2,353	815	416	160	54	2	0	0	0	3,800	230,900	61
40-44	0-20,000	440	12	4	1	0	0	0	0	0	457	23,260	51
	20,001-30,000	642	208	80	29	10	0	0	0	0	969	50,482	52
	30,001-40,000	557	218	130	67	21	4	1	0	0	998	70,361	71
	40,001-50,000	825	392	187	76	23	11	0	0	0	1,514	104,639	69
	50,001+	318	195	179	116	75	32	4	0	0	919	107,743	117
	Subtotal	2,782	1,025	580	289	129	47	5	0	0	4,857	356,486	73
45-49	0-20,000	216	283	3	1	0	0	0	0	1	504	32,707	65
	20,001-30,000	806	358	165	47	7	1	0	0	0	1,384	82,704	60
	30,001-40,000	460	207	150	81	34	10	1	1	0	944	80,963	86
	40,001-50,000	483	286	144	65	25	13	1	0	0	1,017	81,186	80
	50,001+	227	133	141	92	44	15	4	0	0	656	74,526	114
	Subtotal	2,192	1,267	603	286	110	39	6	1	1	4,505	352,087	78

APPENDIX C
Public Employee Leave Analysis
Sick Leave and Demographic Information as of 6-30-2009 (Service Between 7/1/1988 and 6/30/2001)

AGE	SALARY	SICK LEAVE (in Days)									TOTAL EMPLOYEES	TOTAL SICK DAYS	AVERAGE SICK LEAVE
		0-60	61-120	121-180	181-240	241-300	301-360	361-420	421-480	481+			
50-54	0-20,000	77	278	8	0	2	0	0	0	0	365	29,444	81
	20,001-30,000	916	463	221	55	14	4	0	0	0	1,673	107,347	64
	30,001-40,000	427	256	137	91	37	13	0	0	1	962	85,477	89
	40,001-50,000	432	249	138	71	27	11	0	0	0	928	77,431	83
	50,001+	229	131	145	93	52	20	2	3	0	675	79,128	117
	Subtotal		2,081	1,377	649	310	132	48	2	3	1	4,603	378,827
55-59	0-20,000	56	19	7	4	0	0	0	0	0	86	4,312	50
	20,001-30,000	818	415	212	70	16	3	1	1	0	1,536	105,745	69
	30,001-40,000	383	214	151	111	36	13	1	1	1	911	87,378	96
	40,001-50,000	333	224	157	52	28	8	0	0	1	803	72,239	90
	50,001+	218	120	132	84	53	19	1	1	1	629	73,480	117
	Subtotal		1,808	992	659	321	133	43	3	3	3	3,965	343,155
60-64	0-20,000	47	18	6	1	1	0	1	0	0	74	4,305	58
	20,001-30,000	390	246	147	69	16	3	1	0	0	872	71,076	82
	30,001-40,000	176	144	102	68	30	8	0	3	1	532	57,927	109
	40,001-50,000	142	104	71	49	22	6	0	0	0	394	40,806	104
	50,001+	115	59	69	48	31	18	0	3	0	343	43,138	126
	Subtotal		870	571	395	235	100	35	2	6	1	2,215	217,253
65-69	0-20,000	27	14	3	1	1	0	0	0	0	46	2,806	61
	20,001-30,000	108	69	54	15	2	1	0	0	0	249	20,429	82
	30,001-40,000	39	28	23	15	6	3	0	0	0	114	12,542	110
	40,001-50,000	27	15	10	4	2	2	0	0	0	60	5,353	89
	50,001+	45	7	26	10	13	4	0	0	2	107	12,767	119
	Subtotal		246	133	116	45	24	10	0	0	2	576	53,897
70+	0-20,000	15	10	4	3	2	0	0	0	0	34	2,916	86
	20,001-30,000	31	22	13	9	4	1	0	0	0	80	7,932	99
	30,001-40,000	11	13	4	7	2	3	0	0	0	40	4,900	123
	40,001-50,000	7	1	6	3	0	0	0	0	0	17	1,813	107
	50,001+	10	5	4	2	1	1	0	0	0	23	2,179	95
	Subtotal		74	51	31	24	9	5	0	0	0	194	19,739
All	0-20,000	1,248	649	36	11	6	0	1	0	1	1,952	112,069	57
	20,001-30,000	4,362	1,968	965	304	71	13	2	1	0	7,686	487,069	63
	30,001-40,000	2,939	1,385	840	481	175	54	3	5	3	5,885	473,916	81
	40,001-50,000	3,430	1,704	895	360	137	51	1	0	1	6,579	483,229	73
	50,001+	1,391	864	827	527	303	111	11	7	3	4,044	463,888	115
	Total		13,370	6,570	3,563	1,683	692	229	18	13	8	26,146	2,020,172

APPENDIX C

All Retirement Systems
Sick Leave Information
All Employees

Age Group	Service In Years							
	0-5	6-10	11-15	16-20	21-25	26-30	31+	All
0-19	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0
25-29	0	49	2	0	0	0	0	51
30-34	0	1,034	345	1	0	0	0	1,380
35-39	0	1,475	2,039	281	5	0	0	3,800
40-44	0	1,168	1,989	1,628	455	11	0	5,251
45-49	0	916	1,883	1,621	2,044	850	47	7,361
50-54	0	970	1,761	1,773	1,896	2,647	1,492	10,539
55-59	0	760	1,489	1,599	2,506	1,688	3,760	11,802
60-64	0	382	850	912	1,612	900	1,958	6,614
65-69	0	121	214	227	393	156	421	1,532
70+	0	33	74	77	147	67	191	589
All	0	6,908	10,646	8,119	9,058	6,319	7,869	48,919

Age Group	Accumulated Sick Leave Days									
	0-60	61-120	121-180	181-240	241-300	301-360	361-420	421-480	481+	All
0-19	0	0	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0	0	0
25-29	38	12	0	1	0	0	0	0	0	51
30-34	926	327	114	12	1	0	0	0	0	1,380
35-39	2,353	815	416	160	54	2	0	0	0	3,800
40-44	2,903	1,105	662	340	170	58	12	1	0	5,251
45-49	3,015	1,788	1,122	689	385	216	110	30	6	7,361
50-54	3,457	2,466	1,591	1,176	832	528	295	145	49	10,539
55-59	3,297	2,320	1,958	1,480	1,061	720	456	278	232	11,802
60-64	1,665	1,247	1,267	762	567	388	262	217	239	6,614
65-69	452	390	203	121	111	82	60	36	77	1,532
70+	163	118	88	54	37	33	27	19	50	589
All	18,269	10,588	7,421	4,795	3,218	2,027	1,222	726	653	48,919

Age Group	Salary Range (in thousands)						
	0-20	20-30	30-40	40-50	50-60	60+	All
0-19	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0
25-29	2	27	14	6	1	1	51
30-34	18	258	453	517	88	46	1,380
35-39	366	638	917	1,323	313	243	3,800
40-44	459	999	1,091	1,639	659	404	5,251
45-49	515	1,611	1,445	1,821	1,267	702	7,361
50-54	614	2,191	2,145	1,955	2,386	1,248	10,539
55-59	779	2,175	2,149	1,786	2,860	2,053	11,802
60-64	671	1,263	1,314	897	1,277	1,192	6,614
65-69	239	342	285	162	195	309	1,532
70+	125	130	115	57	54	108	589
All	3,788	9,634	9,928	10,163	9,100	6,306	48,919

APPENDIX C

**All Retirement Systems
Sick Leave Information
Employees Hired Before July 1, 1988**

Age Group	Service In Years							
	0-5	6-10	11-15	16-20	21-25	26-30	31+	All
0-19	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0	0
40-44	0	0	0	0	383	11	0	394
45-49	0	0	0	0	1,959	850	47	2,856
50-54	0	0	0	0	1,797	2,647	1,492	5,936
55-59	0	0	0	0	2,389	1,688	3,760	7,837
60-64	0	0	0	0	1,541	900	1,958	4,399
65-69	0	0	0	0	379	156	421	956
70+	0	0	0	0	137	67	191	395
All	0	0	0	0	8,585	6,319	7,869	22,773

Age Group	Accumulated Sick Leave Days									
	0-60	61-120	121-180	181-240	241-300	301-360	361-420	421-480	481+	All
0-19	0	0	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0	0	0	0
40-44	121	80	82	51	41	11	7	1	0	394
45-49	823	521	519	403	275	177	104	29	5	2,856
50-54	1,376	1,089	942	866	700	480	293	142	48	5,936
55-59	1,489	1,328	1,299	1,159	928	677	453	275	229	7,837
60-64	795	676	872	527	467	353	260	211	238	4,399
65-69	206	257	87	76	87	72	60	36	75	956
70+	89	67	57	30	28	28	27	19	50	395
All	4,899	4,018	3,858	3,112	2,526	1,798	1,204	713	645	22,773

Age Group	Salary Range (in thousands)						
	0-20	20-30	30-40	40-50	50-60	60+	All
0-19	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0
40-44	2	30	93	125	97	47	394
45-49	11	227	501	804	912	401	2,856
50-54	249	518	1,183	1,027	2,039	920	5,936
55-59	693	639	1,238	983	2,541	1,743	7,837
60-64	597	391	782	503	1,135	991	4,399
65-69	193	93	171	102	160	237	956
70+	91	50	75	40	46	93	395
All	1,836	1,948	4,043	3,584	6,930	4,432	22,773

APPENDIX C

**All Retirement Systems
Sick Leave Information
Employees Hired Between July 1, 1988 and June 30, 2001**

Age Group	Service In Years							
	0-5	6-10	11-15	16-20	21-25	26-30	31+	All
0-19	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0
25-29	0	49	2	0	0	0	0	51
30-34	0	1,034	345	1	0	0	0	1,380
35-39	0	1,475	2,039	281	5	0	0	3,800
40-44	0	1,168	1,989	1,628	72	0	0	4,857
45-49	0	916	1,883	1,621	85	0	0	4,505
50-54	0	970	1,761	1,773	99	0	0	4,603
55-59	0	760	1,489	1,599	117	0	0	3,965
60-64	0	382	850	912	71	0	0	2,215
65-69	0	121	214	227	14	0	0	576
70+	0	33	74	77	10	0	0	194
All	0	6,908	10,646	8,119	473	0	0	26,146

Age Group	Accumulated Sick Leave Days									
	0-60	61-120	121-180	181-240	241-300	301-360	361-420	421-480	481+	All
0-19	0	0	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0	0	0
25-29	38	12	0	1	0	0	0	0	0	51
30-34	926	327	114	12	1	0	0	0	0	1,380
35-39	2,353	815	416	160	54	2	0	0	0	3,800
40-44	2,782	1,025	580	289	129	47	5	0	0	4,857
45-49	2,192	1,267	603	286	110	39	6	1	1	4,505
50-54	2,081	1,377	649	310	132	48	2	3	1	4,603
55-59	1,808	992	659	321	133	43	3	3	3	3,965
60-64	870	571	395	235	100	35	2	6	1	2,215
65-69	246	133	116	45	24	10	0	0	2	576
70+	74	51	31	24	9	5	0	0	0	194
All	13,370	6,570	3,563	1,683	692	229	18	13	8	26,146

Age Group	Salary Range (in thousands)						
	0-20	20-30	30-40	40-50	50-60	60+	All
0-19	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0
25-29	2	27	14	6	1	1	51
30-34	18	258	453	517	88	46	1,380
35-39	366	638	917	1,323	313	243	3,800
40-44	457	969	998	1,514	562	357	4,857
45-49	504	1,384	944	1,017	355	301	4,505
50-54	365	1,673	962	928	347	328	4,603
55-59	86	1,536	911	803	319	310	3,965
60-64	74	872	532	394	142	201	2,215
65-69	46	249	114	60	35	72	576
70+	34	80	40	17	8	15	194
All	1,952	7,686	5,885	6,579	2,170	1,874	26,146

APPENDIX C

Public Employees Retirement System
Sick Leave Information
All Employees

Age Group	Service In Years							
	0-5	6-10	11-15	16-20	21-25	26-30	31+	All
0-19	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0
25-29	0	26	0	0	0	0	0	26
30-34	0	252	127	0	0	0	0	379
35-39	0	368	637	120	4	0	0	1,129
40-44	0	290	560	412	104	2	0	1,368
45-49	0	254	538	454	374	235	20	1,875
50-54	0	289	545	474	431	471	482	2,692
55-59	0	251	548	474	434	339	631	2,677
60-64	0	146	283	289	239	155	353	1,465
65-69	0	39	75	63	51	34	67	329
70+	0	8	23	22	29	18	35	135
All	0	1,923	3,336	2,308	1,666	1,254	1,588	12,075

Age Group	Accumulated Sick Leave Days									
	0-60	61-120	121-180	181-240	241-300	301-360	361-420	421-480	481+	All
0-19	0	0	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0	0	0
25-29	18	8	0	0	0	0	0	0	0	26
30-34	214	112	49	4	0	0	0	0	0	379
35-39	536	309	193	72	19	0	0	0	0	1,129
40-44	619	304	221	141	61	20	2	0	0	1,368
45-49	685	394	317	225	118	78	48	9	1	1,875
50-54	872	511	419	315	215	173	106	60	21	2,692
55-59	806	461	408	318	220	166	123	69	106	2,677
60-64	390	269	233	186	123	66	55	55	88	1,465
65-69	97	50	64	25	33	24	12	6	18	329
70+	25	20	20	21	9	12	9	6	13	135
All	4,262	2,438	1,924	1,307	798	539	355	205	247	12,075

Age Group	Salary Range (in thousands)						
	0-20	20-30	30-40	40-50	50-60	60+	All
0-19	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0
25-29	2	17	6	1	0	0	26
30-34	9	157	147	42	14	10	379
35-39	21	337	462	160	50	99	1,129
40-44	22	398	547	212	91	98	1,368
45-49	19	534	741	331	131	119	1,875
50-54	32	732	1,130	451	179	168	2,692
55-59	26	706	1,061	451	229	204	2,677
60-64	20	393	550	252	97	153	1,465
65-69	8	104	102	46	28	41	329
70+	3	39	49	19	15	10	135
All	162	3,417	4,795	1,965	834	902	12,075

APPENDIX C

**Public Employees Retirement System
Sick Leave Information
Employees Hired Before July 1, 1988**

Age Group	Service In Years							All
	0-5	6-10	11-15	16-20	21-25	26-30	31+	
0-19	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0	0
40-44	0	0	0	0	74	2	0	76
45-49	0	0	0	0	327	235	20	582
50-54	0	0	0	0	379	471	482	1,332
55-59	0	0	0	0	371	339	631	1,341
60-64	0	0	0	0	204	155	353	712
65-69	0	0	0	0	46	34	67	147
70+	0	0	0	0	21	18	35	74
All	0	0	0	0	1,422	1,254	1,588	4,264

Age Group	Accumulated Sick Leave Days									All
	0-60	61-120	121-180	181-240	241-300	301-360	361-420	421-480	481+	
0-19	0	0	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0	0	0	0
40-44	22	12	14	13	10	3	2	0	0	76
45-49	132	92	84	95	69	55	46	9	0	582
50-54	299	174	191	182	157	145	106	58	20	1,332
55-59	226	146	179	188	168	143	121	66	104	1,341
60-64	123	86	88	85	84	52	54	53	87	712
65-69	27	12	18	10	26	19	12	6	17	147
70+	8	6	8	11	5	8	9	6	13	74
All	837	528	582	584	519	425	350	198	241	4,264

Age Group	Salary Range (in thousands)						All
	0-20	20-30	30-40	40-50	50-60	60+	
0-19	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0
40-44	0	12	40	16	1	7	76
45-49	3	91	255	144	48	41	582
50-54	5	213	654	275	98	87	1,332
55-59	2	201	591	277	143	127	1,341
60-64	2	98	310	140	69	93	712
65-69	1	28	54	24	18	22	147
70+	0	14	28	13	11	8	74
All	13	657	1,932	889	388	385	4,264

APPENDIX C

**Public Employees Retirement System
Sick Leave Information
Employees Hired Between July 1, 1988 and June 30, 2001**

Age Group	Service In Years							
	0-5	6-10	11-15	16-20	21-25	26-30	31+	All
0-19	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0
25-29	0	26	0	0	0	0	0	26
30-34	0	252	127	0	0	0	0	379
35-39	0	368	637	120	4	0	0	1,129
40-44	0	290	560	412	30	0	0	1,292
45-49	0	254	538	454	47	0	0	1,293
50-54	0	289	545	474	52	0	0	1,360
55-59	0	251	548	474	63	0	0	1,336
60-64	0	146	283	289	35	0	0	753
65-69	0	39	75	63	5	0	0	182
70+	0	8	23	22	8	0	0	61
All	0	1,923	3,336	2,308	244	0	0	7,811

Age Group	Accumulated Sick Leave Days									
	0-60	61-120	121-180	181-240	241-300	301-360	361-420	421-480	481+	All
0-19	0	0	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0	0	0
25-29	18	8	0	0	0	0	0	0	0	26
30-34	214	112	49	4	0	0	0	0	0	379
35-39	536	309	193	72	19	0	0	0	0	1,129
40-44	597	292	207	128	51	17	0	0	0	1,292
45-49	553	302	233	130	49	23	2	0	1	1,293
50-54	573	337	228	133	58	28	0	2	1	1,360
55-59	580	315	229	130	52	23	2	3	2	1,336
60-64	267	183	145	101	39	14	1	2	1	753
65-69	70	38	46	15	7	5	0	0	1	182
70+	17	14	12	10	4	4	0	0	0	61
All	3,425	1,910	1,342	723	279	114	5	7	6	7,811

Age Group	Salary Range (in thousands)						
	0-20	20-30	30-40	40-50	50-60	60+	All
0-19	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0
25-29	2	17	6	1	0	0	26
30-34	9	157	147	42	14	10	379
35-39	21	337	462	160	50	99	1,129
40-44	22	386	507	196	90	91	1,292
45-49	16	443	486	187	83	78	1,293
50-54	27	519	476	176	81	81	1,360
55-59	24	505	470	174	86	77	1,336
60-64	18	295	240	112	28	60	753
65-69	7	76	48	22	10	19	182
70+	3	25	21	6	4	2	61
All	149	2,760	2,863	1,076	446	517	7,811

APPENDIX C

Teachers Retirement System
Sick Leave Information
All Employees

Age Group	Service In Years							
	0-5	6-10	11-15	16-20	21-25	26-30	31+	All
0-19	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0
25-29	0	22	2	0	0	0	0	24
30-34	0	696	173	1	0	0	0	870
35-39	0	641	1,128	117	1	0	0	1,887
40-44	0	560	920	991	263	7	0	2,741
45-49	0	551	880	726	1,483	543	22	4,205
50-54	0	549	990	799	1,016	2,028	916	6,298
55-59	0	387	750	856	1,159	1,203	2,931	7,286
60-64	0	158	431	452	647	634	1,398	3,720
65-69	0	60	97	102	120	84	240	703
70+	0	19	41	37	39	29	108	273
All	0	3,643	5,412	4,081	4,728	4,528	5,615	28,007

Age Group	Accumulated Sick Leave Days									
	0-60	61-120	121-180	181-240	241-300	301-360	361-420	421-480	481+	All
0-19	0	0	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0	0	0
25-29	19	4	0	1	0	0	0	0	0	24
30-34	673	174	20	2	1	0	0	0	0	870
35-39	1,348	416	105	14	4	0	0	0	0	1,887
40-44	1,623	667	295	115	33	6	1	1	0	2,741
45-49	1,863	974	657	361	206	93	31	15	5	4,205
50-54	2,190	1,295	1,009	734	525	302	156	64	23	6,298
55-59	2,052	1,311	1,107	1,024	733	462	304	183	110	7,286
60-64	955	623	584	488	384	264	176	122	124	3,720
65-69	212	126	113	71	59	43	32	13	34	703
70+	90	41	31	25	22	16	13	9	26	273
All	11,025	5,631	3,921	2,835	1,967	1,186	713	407	322	28,007

Age Group	Salary Range (in thousands)						
	0-20	20-30	30-40	40-50	50-60	60+	All
0-19	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0
25-29	0	9	8	5	1	1	24
30-34	9	86	278	417	51	29	870
35-39	22	255	368	1,012	153	77	1,887
40-44	52	526	390	1,236	386	151	2,741
45-49	75	967	524	1,309	980	350	4,205
50-54	78	1,332	754	1,308	2,033	793	6,298
55-59	68	1,332	821	1,139	2,461	1,465	7,286
60-64	62	765	571	527	1,060	735	3,720
65-69	41	211	130	86	135	100	703
70+	29	85	57	25	31	46	273
All	436	5,568	3,901	7,064	7,291	3,747	28,007

APPENDIX C

**Teachers Retirement System
Sick Leave Information
Employees Hired Before July 1, 1988**

Age Group	Service In Years							All
	0-5	6-10	11-15	16-20	21-25	26-30	31+	
0-19	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0	0
40-44	0	0	0	0	253	7	0	260
45-49	0	0	0	0	1,471	543	22	2,036
50-54	0	0	0	0	998	2,028	916	3,942
55-59	0	0	0	0	1,136	1,203	2,931	5,270
60-64	0	0	0	0	634	634	1,398	2,666
65-69	0	0	0	0	116	84	240	440
70+	0	0	0	0	38	29	108	175
All	0	0	0	0	4,646	4,528	5,615	14,789

Age Group	Accumulated Sick Leave Days									All
	0-60	61-120	121-180	181-240	241-300	301-360	361-420	421-480	481+	
0-19	0	0	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0	0	0	0
40-44	83	61	56	36	19	4	0	1	0	260
45-49	650	392	399	276	180	90	30	14	5	2,036
50-54	963	631	691	626	493	296	155	64	23	3,942
55-59	1,093	738	790	898	698	458	303	183	109	5,270
60-64	522	327	396	399	349	255	175	119	124	2,666
65-69	97	49	63	56	54	42	32	13	34	440
70+	50	13	15	14	19	16	13	9	26	175
All	3,458	2,211	2,410	2,305	1,812	1,161	708	403	321	14,789

Age Group	Salary Range (in thousands)						All
	0-20	20-30	30-40	40-50	50-60	60+	
0-19	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0
40-44	2	14	34	88	89	33	260
45-49	8	122	197	598	818	293	2,036
50-54	9	274	405	659	1,872	723	3,942
55-59	16	403	524	597	2,316	1,414	5,270
60-64	15	261	377	303	998	712	2,666
65-69	6	61	94	58	125	96	440
70+	4	34	45	17	30	45	175
All	60	1,169	1,676	2,320	6,248	3,316	14,789

APPENDIX C

Teachers Retirement System
Sick Leave Information
Employees Hired Between July 1, 1988 and June 30, 1991

Age Group	Service In Years							All
	0-5	6-10	11-15	16-20	21-25	26-30	31+	
0-19	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0	0
35-39	0	0	0	7	1	0	0	8
40-44	0	0	0	618	10	0	0	628
45-49	0	0	0	470	12	0	0	482
50-54	0	0	0	499	18	0	0	517
55-59	0	0	0	516	23	0	0	539
60-64	0	0	0	292	13	0	0	305
65-69	0	0	0	55	4	0	0	59
70+	0	0	0	26	1	0	0	27
All	0	0	0	2,483	82	0	0	2,565

Age Group	Accumulated Sick Leave Days									All
	0-60	61-120	121-180	181-240	241-300	301-360	361-420	421-480	481+	
0-19	0	0	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0	0	0	0
35-39	3	2	1	0	2	0	0	0	0	8
40-44	308	152	110	44	11	2	1	0	0	628
45-49	203	114	94	49	18	3	1	0	0	482
50-54	197	121	104	64	25	5	1	0	0	517
55-59	195	138	109	69	23	3	1	0	1	539
60-64	88	70	55	53	28	7	1	3	0	305
65-69	18	15	14	8	3	1	0	0	0	59
70+	4	8	6	8	1	0	0	0	0	27
All	1,016	620	493	295	111	21	5	3	1	2,565

Age Group	Salary Range (in thousands)						All
	0-20	20-30	30-40	40-50	50-60	60+	
0-19	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0
35-39	0	1	4	3	0	0	8
40-44	0	44	48	335	144	57	628
45-49	3	82	61	219	84	33	482
50-54	3	141	66	193	85	29	517
55-59	6	172	73	182	76	30	539
60-64	5	107	68	85	29	11	305
65-69	4	28	12	10	4	1	59
70+	6	12	5	3	0	1	27
All	27	587	337	1,030	422	162	2,565

APPENDIX C

Teachers Retirement System
Sick Leave Information
Employees Hired Between July 1, 1991 and June 30, 2001

Age Group	Service In Years							
	0-5	6-10	11-15	16-20	21-25	26-30	31+	All
0-19	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0
25-29	0	22	2	0	0	0	0	24
30-34	0	696	173	1	0	0	0	870
35-39	0	641	1,128	110	0	0	0	1,879
40-44	0	560	920	373	0	0	0	1,853
45-49	0	551	880	256	0	0	0	1,687
50-54	0	549	990	300	0	0	0	1,839
55-59	0	387	750	340	0	0	0	1,477
60-64	0	158	431	160	0	0	0	749
65-69	0	60	97	47	0	0	0	204
70+	0	19	41	11	0	0	0	71
All	0	3,643	5,412	1,598	0	0	0	10,653

Age Group	Accumulated Sick Leave Days									
	0-60	61-120	121-180	181-240	241-300	301-360	361-420	421-480	481+	All
0-19	0	0	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0	0	0
25-29	19	4	0	1	0	0	0	0	0	24
30-34	673	174	20	2	1	0	0	0	0	870
35-39	1,345	414	104	14	2	0	0	0	0	1,879
40-44	1,232	454	129	35	3	0	0	0	0	1,853
45-49	1,010	468	164	36	8	0	0	1	0	1,687
50-54	1,030	543	214	44	7	1	0	0	0	1,839
55-59	764	435	208	57	12	1	0	0	0	1,477
60-64	345	226	133	36	7	2	0	0	0	749
65-69	97	62	36	7	2	0	0	0	0	204
70+	36	20	10	3	2	0	0	0	0	71
All	6,551	2,800	1,018	235	44	4	0	1	0	10,653

Age Group	Salary Range (in thousands)						
	0-20	20-30	30-40	40-50	50-60	60+	All
0-19	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0
25-29	0	9	8	5	1	1	24
30-34	9	86	278	417	51	29	870
35-39	22	254	364	1,009	153	77	1,879
40-44	50	468	308	813	153	61	1,853
45-49	64	763	266	492	78	24	1,687
50-54	66	917	283	456	76	41	1,839
55-59	46	757	224	360	69	21	1,477
60-64	42	397	126	139	33	12	749
65-69	31	122	24	18	6	3	204
70+	19	39	7	5	1	0	71
All	349	3,812	1,888	3,714	621	269	10,653

APPENDIX C

Teachers Defined Contribution Retirement System
Sick Leave Information
All Employees

Age Group	Service In Years							All
	0-5	6-10	11-15	16-20	21-25	26-30	31+	
0-19	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0
30-34	0	4	1	0	0	0	0	5
35-39	0	8	14	1	0	0	0	23
40-44	0	10	14	18	4	0	0	46
45-49	0	5	16	10	19	8	0	58
50-54	0	10	13	8	18	9	4	62
55-59	0	10	17	11	10	4	7	59
60-64	0	4	9	10	5	1	2	31
65-69	0	0	4	1	3	0	0	8
70+	0	0	0	0	0	0	0	0
All	0	51	88	59	59	22	13	292

Age Group	Accumulated Sick Leave Days									All
	0-60	61-120	121-180	181-240	241-300	301-360	361-420	421-480	481+	
0-19	0	0	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0	0	0
30-34	4	1	0	0	0	0	0	0	0	5
35-39	14	5	4	0	0	0	0	0	0	23
40-44	21	15	6	2	2	0	0	0	0	46
45-49	17	17	14	8	0	2	0	0	0	58
50-54	16	19	13	8	4	2	0	0	0	62
55-59	29	9	5	12	4	0	0	0	0	59
60-64	6	12	4	5	1	3	0	0	0	31
65-69	3	3	1	1	0	0	0	0	0	8
70+	0	0	0	0	0	0	0	0	0	0
All	110	81	47	36	11	7	0	0	0	292

Age Group	Salary Range (in thousands)						All
	0-20	20-30	30-40	40-50	50-60	60+	
0-19	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0
30-34	0	0	1	4	0	0	5
35-39	0	4	4	6	0	9	23
40-44	0	7	6	11	4	18	46
45-49	0	5	13	12	8	20	58
50-54	0	8	12	11	11	20	62
55-59	0	9	17	3	7	23	59
60-64	0	7	10	4	2	8	31
65-69	0	3	2	0	0	3	8
70+	0	0	0	0	0	0	0
All	0	43	65	51	32	101	292

APPENDIX C

Teachers Defined Contribution Retirement System
Sick Leave Information
Employees Hired Before July 1, 1988

Age Group	Service In Years							All
	0-5	6-10	11-15	16-20	21-25	26-30	31+	
0-19	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0	0
40-44	0	0	0	0	2	0	0	2
45-49	0	0	0	0	14	8	0	22
50-54	0	0	0	0	16	9	4	29
55-59	0	0	0	0	9	4	7	20
60-64	0	0	0	0	4	1	2	7
65-69	0	0	0	0	3	0	0	3
70+	0	0	0	0	0	0	0	0
All	0	0	0	0	48	22	13	83

Age Group	Accumulated Sick Leave Days									All
	0-60	61-120	121-180	181-240	241-300	301-360	361-420	421-480	481+	
0-19	0	0	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0	0	0	0
40-44	0	1	0	0	1	0	0	0	0	2
45-49	4	8	5	3	0	2	0	0	0	22
50-54	7	4	6	6	4	2	0	0	0	29
55-59	10	0	2	6	2	0	0	0	0	20
60-64	1	1	1	1	1	2	0	0	0	7
65-69	1	2	0	0	0	0	0	0	0	3
70+	0	0	0	0	0	0	0	0	0	0
All	23	16	14	16	8	6	0	0	0	83

Age Group	Salary Range (in thousands)						All
	0-20	20-30	30-40	40-50	50-60	60+	
0-19	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0
40-44	0	0	1	1	0	0	2
45-49	0	1	5	5	3	8	22
50-54	0	1	5	5	4	14	29
55-59	0	3	4	0	1	12	20
60-64	0	1	2	1	0	3	7
65-69	0	0	1	0	0	2	3
70+	0	0	0	0	0	0	0
All	0	6	18	12	8	39	83

APPENDIX C

Teachers Defined Contribution Retirement System
Sick Leave Information
Employees Hired Between July 1, 1988 and June 30, 1991

Age Group	Service In Years							All
	0-5	6-10	11-15	16-20	21-25	26-30	31+	
0-19	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0	0
40-44	0	0	0	8	2	0	0	10
45-49	0	0	0	7	5	0	0	12
50-54	0	0	0	3	2	0	0	5
55-59	0	0	0	8	1	0	0	9
60-64	0	0	0	3	1	0	0	4
65-69	0	0	0	0	0	0	0	0
70+	0	0	0	0	0	0	0	0
All	0	0	0	29	11	0	0	40

Age Group	Accumulated Sick Leave Days									All
	0-60	61-120	121-180	181-240	241-300	301-360	361-420	421-480	481+	
0-19	0	0	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0	0	0	0
40-44	4	2	2	2	0	0	0	0	0	10
45-49	5	0	3	4	0	0	0	0	0	12
50-54	1	2	2	0	0	0	0	0	0	5
55-59	4	2	0	2	1	0	0	0	0	9
60-64	0	1	1	1	0	1	0	0	0	4
65-69	0	0	0	0	0	0	0	0	0	0
70+	0	0	0	0	0	0	0	0	0	0
All	14	7	8	9	1	1	0	0	0	40

Age Group	Salary Range (in thousands)						All
	0-20	20-30	30-40	40-50	50-60	60+	
0-19	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0
40-44	0	0	1	4	1	4	10
45-49	0	0	4	1	1	6	12
50-54	0	0	1	0	3	1	5
55-59	0	1	4	1	2	1	9
60-64	0	0	3	0	0	1	4
65-69	0	0	0	0	0	0	0
70+	0	0	0	0	0	0	0
All	0	1	13	6	7	13	40

APPENDIX C

Teachers Defined Contribution Retirement System
Sick Leave Information
Employees Hired Between July 1, 1991 and June 30, 2001

Age Group	Service In Years							All
	0-5	6-10	11-15	16-20	21-25	26-30	31+	
0-19	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0
30-34	0	4	1	0	0	0	0	5
35-39	0	8	14	1	0	0	0	23
40-44	0	10	14	10	0	0	0	34
45-49	0	5	16	3	0	0	0	24
50-54	0	10	13	5	0	0	0	28
55-59	0	10	17	3	0	0	0	30
60-64	0	4	9	7	0	0	0	20
65-69	0	0	4	1	0	0	0	5
70+	0	0	0	0	0	0	0	0
All	0	51	88	30	0	0	0	169

Age Group	Accumulated Sick Leave Days									All
	0-60	61-120	121-180	181-240	241-300	301-360	361-420	421-480	481+	
0-19	0	0	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0	0	0
30-34	4	1	0	0	0	0	0	0	0	5
35-39	14	5	4	0	0	0	0	0	0	23
40-44	17	12	4	0	1	0	0	0	0	34
45-49	8	9	6	1	0	0	0	0	0	24
50-54	8	13	5	2	0	0	0	0	0	28
55-59	15	7	3	4	1	0	0	0	0	30
60-64	5	10	2	3	0	0	0	0	0	20
65-69	2	1	1	1	0	0	0	0	0	5
70+	0	0	0	0	0	0	0	0	0	0
All	73	58	25	11	2	0	0	0	0	169

Age Group	Salary Range (in thousands)						All
	0-20	20-30	30-40	40-50	50-60	60+	
0-19	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0
30-34	0	0	1	4	0	0	5
35-39	0	4	4	6	0	9	23
40-44	0	7	4	6	3	14	34
45-49	0	4	4	6	4	6	24
50-54	0	7	6	6	4	5	28
55-59	0	5	9	2	4	10	30
60-64	0	6	5	3	2	4	20
65-69	0	3	1	0	0	1	5
70+	0	0	0	0	0	0	0
All	0	36	34	33	17	49	169

APPENDIX C

**Teachers' Insurance and Annuity Association and College Retirement Equities Fund
Sick Leave Information
All Employees**

Age Group	Service In Years							
	0-5	6-10	11-15	16-20	21-25	26-30	31+	All
0-19	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0
25-29	0	1	0	0	0	0	0	1
30-34	0	60	19	0	0	0	0	79
35-39	0	116	150	35	0	0	0	301
40-44	0	141	198	162	61	2	0	564
45-49	0	103	206	239	126	62	5	741
50-54	0	122	211	234	188	134	89	978
55-59	0	112	173	258	228	142	191	1,104
60-64	0	74	127	160	148	110	205	824
65-69	0	22	38	61	34	38	114	307
70+	0	6	10	18	7	10	44	95
All	0	757	1,132	1,167	792	498	648	4,994

Age Group	Accumulated Sick Leave Days									
	0-60	61-120	121-180	181-240	241-300	301-360	361-420	421-480	481+	All
0-19	0	0	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0	0	0
25-29	1	0	0	0	0	0	0	0	0	1
30-34	32	36	10	1	0	0	0	0	0	79
35-39	134	77	65	22	3	0	0	0	0	301
40-44	257	112	114	50	24	7	0	0	0	564
45-49	299	135	131	90	50	28	7	1	0	741
50-54	376	148	150	118	88	48	30	17	3	978
55-59	410	139	164	125	103	92	29	26	16	1,104
60-64	314	118	98	83	58	55	31	40	27	824
65-69	140	26	25	24	19	15	16	17	25	307
70+	48	9	3	5	5	5	5	4	11	95
All	2,011	800	760	518	350	250	118	105	82	4,994

Age Group	Salary Range (in thousands)						
	0-20	20-30	30-40	40-50	50-60	60+	All
0-19	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0
25-29	0	1	0	0	0	0	1
30-34	0	15	27	17	13	7	79
35-39	2	42	83	71	48	55	301
40-44	5	68	148	138	80	125	564
45-49	5	104	166	164	117	185	741
50-54	11	119	248	182	160	258	978
55-59	11	128	250	193	161	361	1,104
60-64	16	98	183	114	117	296	824
65-69	5	24	51	30	32	165	307
70+	7	6	9	13	8	52	95
All	62	605	1,165	922	736	1,504	4,994

APPENDIX C

Teachers' Insurance and Annuity Association and College Retirement Equities Fund
Sick Leave Information
Employees Hired Before July 1, 1988

Age Group	Service In Years							All
	0-5	6-10	11-15	16-20	21-25	26-30	31+	
0-19	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0	0
40-44	0	0	0	0	45	2	0	47
45-49	0	0	0	0	111	62	5	178
50-54	0	0	0	0	163	134	89	386
55-59	0	0	0	0	198	142	191	531
60-64	0	0	0	0	126	110	205	441
65-69	0	0	0	0	29	38	114	181
70+	0	0	0	0	6	10	44	60
All	0	0	0	0	678	498	648	1,824

Age Group	Accumulated Sick Leave Days									All
	0-60	61-120	121-180	181-240	241-300	301-360	361-420	421-480	481+	
0-19	0	0	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0	0	0	0
40-44	16	6	12	2	8	3	0	0	0	47
45-49	36	29	31	28	24	22	7	1	0	178
50-54	105	45	54	52	46	35	30	16	3	386
55-59	160	44	54	66	60	76	29	26	16	531
60-64	149	37	39	42	33	44	31	39	27	441
65-69	81	9	6	10	7	11	16	17	24	181
70+	31	0	0	2	3	4	5	4	11	60
All	578	170	196	202	181	195	118	103	81	1,824

Age Group	Salary Range (in thousands)						All
	0-20	20-30	30-40	40-50	50-60	60+	
0-19	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0
40-44	0	4	18	20	1	4	47
45-49	0	12	44	56	31	35	178
50-54	0	30	118	87	63	88	386
55-59	1	32	119	109	80	190	531
60-64	7	31	93	59	68	183	441
65-69	1	4	22	20	17	117	181
70+	1	2	2	10	5	40	60
All	10	115	416	361	265	657	1,824

APPENDIX C

Teachers' Insurance and Annuity Association and College Retirement Equities Fund
Sick Leave Information
Employees Hired Between July 1, 1988 and June 30, 1991

Age Group	Service In Years							All
	0-5	6-10	11-15	16-20	21-25	26-30	31+	
0-19	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0	0
35-39	0	0	0	2	0	0	0	2
40-44	0	0	0	66	16	0	0	82
45-49	0	0	0	122	15	0	0	137
50-54	0	0	0	109	25	0	0	134
55-59	0	0	0	128	30	0	0	158
60-64	0	0	0	74	22	0	0	96
65-69	0	0	0	35	5	0	0	40
70+	0	0	0	10	1	0	0	11
All	0	0	0	546	114	0	0	660

Age Group	Accumulated Sick Leave Days									All
	0-60	61-120	121-180	181-240	241-300	301-360	361-420	421-480	481+	
0-19	0	0	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0	0	0	0
35-39	2	0	0	0	0	0	0	0	0	2
40-44	32	15	14	10	7	4	0	0	0	82
45-49	47	21	30	24	10	5	0	0	0	137
50-54	53	11	18	22	20	10	0	0	0	134
55-59	63	18	23	17	22	15	0	0	0	158
60-64	42	9	12	12	10	11	0	0	0	96
65-69	19	3	2	6	6	4	0	0	0	40
70+	5	1	0	2	2	1	0	0	0	11
All	263	78	99	93	77	50	0	0	0	660

Age Group	Salary Range (in thousands)						All
	0-20	20-30	30-40	40-50	50-60	60+	
0-19	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0
35-39	0	0	0	1	0	1	2
40-44	0	1	23	23	15	20	82
45-49	1	10	27	41	21	37	137
50-54	1	10	33	25	26	39	134
55-59	2	7	42	27	30	50	158
60-64	1	10	21	12	13	39	96
65-69	1	7	14	3	1	14	40
70+	2	2	2	2	1	2	11
All	8	47	162	134	107	202	660

APPENDIX C

Teachers' Insurance and Annuity Association and College Retirement Equities Fund
Sick Leave Information
Employees Hired Between July 1, 1991 and June 30, 2001

Age Group	Service In Years							
	0-5	6-10	11-15	16-20	21-25	26-30	31+	All
0-19	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0
25-29	0	1	0	0	0	0	0	1
30-34	0	60	19	0	0	0	0	79
35-39	0	116	150	33	0	0	0	299
40-44	0	141	198	96	0	0	0	435
45-49	0	103	206	117	0	0	0	426
50-54	0	122	211	125	0	0	0	458
55-59	0	112	173	130	0	0	0	415
60-64	0	74	127	86	0	0	0	287
65-69	0	22	38	26	0	0	0	86
70+	0	6	10	8	0	0	0	24
All	0	757	1,132	621	0	0	0	2,510

Age Group	Accumulated Sick Leave Days									
	0-60	61-120	121-180	181-240	241-300	301-360	361-420	421-480	481+	All
0-19	0	0	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0	0	0
25-29	1	0	0	0	0	0	0	0	0	1
30-34	32	36	10	1	0	0	0	0	0	79
35-39	132	77	65	22	3	0	0	0	0	299
40-44	209	91	88	38	9	0	0	0	0	435
45-49	216	85	70	38	16	1	0	0	0	426
50-54	218	92	78	44	22	3	0	1	0	458
55-59	187	77	87	42	21	1	0	0	0	415
60-64	123	72	47	29	15	0	0	1	0	287
65-69	40	14	17	8	6	0	0	0	1	86
70+	12	8	3	1	0	0	0	0	0	24
All	1,170	552	465	223	92	5	0	2	1	2,510

Age Group	Salary Range (in thousands)						
	0-20	20-30	30-40	40-50	50-60	60+	All
0-19	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0
25-29	0	1	0	0	0	0	1
30-34	0	15	27	17	13	7	79
35-39	2	42	83	70	48	54	299
40-44	5	63	107	95	64	101	435
45-49	4	82	95	67	65	113	426
50-54	10	79	97	70	71	131	458
55-59	8	89	89	57	51	121	415
60-64	8	57	69	43	36	74	287
65-69	3	13	15	7	14	34	86
70+	4	2	5	1	2	10	24
All	44	443	587	427	364	645	2,510

APPENDIX C

Great West
Sick Leave Information
All Employees

Age Group	Service In Years							All
	0-5	6-10	11-15	16-20	21-25	26-30	31+	
0-19	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0	0
40-44	0	1	0	0	0	0	0	1
45-49	0	1	0	0	0	0	0	1
50-54	0	0	0	0	0	0	0	0
55-59	0	0	0	0	0	0	0	0
60-64	0	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0	0
70+	0	0	0	0	0	0	0	0
All	0	2	0	0	0	0	0	2

Age Group	Accumulated Sick Leave Days									All
	0-60	61-120	121-180	181-240	241-300	301-360	361-420	421-480	481+	
0-19	0	0	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0	0	0	0
40-44	1	0	0	0	0	0	0	0	0	1
45-49	1	0	0	0	0	0	0	0	0	1
50-54	0	0	0	0	0	0	0	0	0	0
55-59	0	0	0	0	0	0	0	0	0	0
60-64	0	0	0	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0	0	0	0
70+	0	0	0	0	0	0	0	0	0	0
All	2	0	0	0	0	0	0	0	0	2

Age Group	Salary Range (in thousands)						All
	0-20	20-30	30-40	40-50	50-60	60+	
0-19	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0
40-44	0	0	0	1	0	0	1
45-49	0	0	1	0	0	0	1
50-54	0	0	0	0	0	0	0
55-59	0	0	0	0	0	0	0
60-64	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0
70+	0	0	0	0	0	0	0
All	0	0	1	1	0	0	2

APPENDIX C

Great West
Sick Leave Information
Employees Hired Before July 1, 1988

Age Group	Service In Years							
	0-5	6-10	11-15	16-20	21-25	26-30	31+	All
0-19	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0	0
40-44	0	0	0	0	0	0	0	0
45-49	0	0	0	0	0	0	0	0
50-54	0	0	0	0	0	0	0	0
55-59	0	0	0	0	0	0	0	0
60-64	0	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0	0
70+	0	0	0	0	0	0	0	0
All	0	0	0	0	0	0	0	0

Age Group	Accumulated Sick Leave Days									
	0-60	61-120	121-180	181-240	241-300	301-360	361-420	421-480	481+	All
0-19	0	0	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0	0	0	0
40-44	0	0	0	0	0	0	0	0	0	0
45-49	0	0	0	0	0	0	0	0	0	0
50-54	0	0	0	0	0	0	0	0	0	0
55-59	0	0	0	0	0	0	0	0	0	0
60-64	0	0	0	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0	0	0	0
70+	0	0	0	0	0	0	0	0	0	0
All	0	0	0	0	0	0	0	0	0	0

Age Group	Salary Range (in thousands)						
	0-20	20-30	30-40	40-50	50-60	60+	All
0-19	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0
40-44	0	0	0	0	0	0	0
45-49	0	0	0	0	0	0	0
50-54	0	0	0	0	0	0	0
55-59	0	0	0	0	0	0	0
60-64	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0
70+	0	0	0	0	0	0	0
All	0	0	0	0	0	0	0

APPENDIX C

Great West
Sick Leave Information
Employees Hired Between July 1, 1988 and June 30, 1991

Age Group	Service In Years							
	0-5	6-10	11-15	16-20	21-25	26-30	31+	All
0-19	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0	0
40-44	0	0	0	0	0	0	0	0
45-49	0	0	0	0	0	0	0	0
50-54	0	0	0	0	0	0	0	0
55-59	0	0	0	0	0	0	0	0
60-64	0	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0	0
70+	0	0	0	0	0	0	0	0
All	0	0	0	0	0	0	0	0

Age Group	Accumulated Sick Leave Days									
	0-60	61-120	121-180	181-240	241-300	301-360	361-420	421-480	481+	All
0-19	0	0	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0	0	0	0
40-44	0	0	0	0	0	0	0	0	0	0
45-49	0	0	0	0	0	0	0	0	0	0
50-54	0	0	0	0	0	0	0	0	0	0
55-59	0	0	0	0	0	0	0	0	0	0
60-64	0	0	0	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0	0	0	0
70+	0	0	0	0	0	0	0	0	0	0
All	0	0	0	0	0	0	0	0	0	0

Age Group	Salary Range (in thousands)						
	0-20	20-30	30-40	40-50	50-60	60+	All
0-19	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0
40-44	0	0	0	0	0	0	0
45-49	0	0	0	0	0	0	0
50-54	0	0	0	0	0	0	0
55-59	0	0	0	0	0	0	0
60-64	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0
70+	0	0	0	0	0	0	0
All	0	0	0	0	0	0	0

APPENDIX C

Great West
Sick Leave Information
Employees Hired Between July 1, 1991 and June 30, 2001

Age Group	Service In Years							All
	0-5	6-10	11-15	16-20	21-25	26-30	31+	
0-19	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0	0
40-44	0	1	0	0	0	0	0	1
45-49	0	1	0	0	0	0	0	1
50-54	0	0	0	0	0	0	0	0
55-59	0	0	0	0	0	0	0	0
60-64	0	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0	0
70+	0	0	0	0	0	0	0	0
All	0	2	0	0	0	0	0	2

Age Group	Accumulated Sick Leave Days									All
	0-60	61-120	121-180	181-240	241-300	301-360	361-420	421-480	481+	
0-19	0	0	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0	0	0	0
40-44	1	0	0	0	0	0	0	0	0	1
45-49	1	0	0	0	0	0	0	0	0	1
50-54	0	0	0	0	0	0	0	0	0	0
55-59	0	0	0	0	0	0	0	0	0	0
60-64	0	0	0	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0	0	0	0
70+	0	0	0	0	0	0	0	0	0	0
All	2	0	0	0	0	0	0	0	0	2

Age Group	Salary Range (in thousands)						All
	0-20	20-30	30-40	40-50	50-60	60+	
0-19	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0
40-44	0	0	0	1	0	0	1
45-49	0	0	1	0	0	0	1
50-54	0	0	0	0	0	0	0
55-59	0	0	0	0	0	0	0
60-64	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0
70+	0	0	0	0	0	0	0
All	0	0	1	1	0	0	2

APPENDIX C

Public Safety Retirement Systems
Sick Leave Information
All Employees

Age Group	Service In Years							All
	0-5	6-10	11-15	16-20	21-25	26-30	31+	
0-19	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0
30-34	0	22	25	0	0	0	0	47
35-39	0	21	110	8	0	0	0	139
40-44	0	11	72	45	23	0	0	151
45-49	0	2	9	10	42	2	0	65
50-54	0	0	2	0	8	5	1	16
55-59	0	0	1	0	1	0	0	2
60-64	0	0	0	1	0	0	0	1
65-69	0	0	0	0	0	0	0	0
70+	0	0	0	0	0	0	0	0
All	0	56	219	64	74	7	1	421

Age Group	Accumulated Sick Leave Days									All
	0-60	61-120	121-180	181-240	241-300	301-360	361-420	421-480	481+	
0-19	0	0	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0	0	0
30-34	3	4	35	5	0	0	0	0	0	47
35-39	0	8	49	52	28	2	0	0	0	139
40-44	2	7	26	32	50	25	9	0	0	151
45-49	1	1	3	5	11	15	24	5	0	65
50-54	3	0	0	1	0	3	3	4	2	16
55-59	0	0	0	1	1	0	0	0	0	2
60-64	0	0	0	0	1	0	0	0	0	1
65-69	0	0	0	0	0	0	0	0	0	0
70+	0	0	0	0	0	0	0	0	0	0
All	9	20	113	96	91	45	36	9	2	421

Age Group	Salary Range (in thousands)						All
	0-20	20-30	30-40	40-50	50-60	60+	
0-19	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0
30-34	0	0	0	37	10	0	47
35-39	0	0	0	74	62	3	139
40-44	0	0	0	41	98	12	151
45-49	0	1	0	5	31	28	65
50-54	0	0	1	3	3	9	16
55-59	0	0	0	0	2	0	2
60-64	0	0	0	0	1	0	1
65-69	0	0	0	0	0	0	0
70+	0	0	0	0	0	0	0
All	0	1	1	160	207	52	421

APPENDIX C

Public Safety "A" Retirement System
Sick Leave Information
All Employees

Age Group	Service In Years							
	0-5	6-10	11-15	16-20	21-25	26-30	31+	All
0-19	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0	0
35-39	0	0	11	6	0	0	0	17
40-44	0	0	17	44	23	0	0	84
45-49	0	0	2	9	41	2	0	54
50-54	0	0	0	0	8	4	1	13
55-59	0	0	0	0	0	0	0	0
60-64	0	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0	0
70+	0	0	0	0	0	0	0	0
All	0	0	30	59	72	6	1	168

Age Group	Accumulated Sick Leave Days									
	0-60	61-120	121-180	181-240	241-300	301-360	361-420	421-480	481+	All
0-19	0	0	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0	0	0	0
35-39	0	1	0	4	10	2	0	0	0	17
40-44	0	1	2	8	40	24	9	0	0	84
45-49	1	0	0	2	7	15	24	5	0	54
50-54	2	0	0	0	0	3	3	3	2	13
55-59	0	0	0	0	0	0	0	0	0	0
60-64	0	0	0	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0	0	0	0
70+	0	0	0	0	0	0	0	0	0	0
All	3	2	2	14	57	44	36	8	2	168

Age Group	Salary Range (in thousands)						
	0-20	20-30	30-40	40-50	50-60	60+	All
0-19	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0
35-39	0	0	0	1	13	3	17
40-44	0	0	0	7	65	12	84
45-49	0	1	0	1	24	28	54
50-54	0	0	1	1	3	8	13
55-59	0	0	0	0	0	0	0
60-64	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0
70+	0	0	0	0	0	0	0
All	0	1	1	10	105	51	168

APPENDIX C

Public Safety "A" Retirement System
Sick Leave Information
Employees Hired Before July 1, 1988

Age Group	Service In Years							All
	0-5	6-10	11-15	16-20	21-25	26-30	31+	
0-19	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0	0
40-44	0	0	0	0	9	0	0	9
45-49	0	0	0	0	35	2	0	37
50-54	0	0	0	0	6	4	1	11
55-59	0	0	0	0	0	0	0	0
60-64	0	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0	0
70+	0	0	0	0	0	0	0	0
All	0	0	0	0	50	6	1	57

Age Group	Accumulated Sick Leave Days									All
	0-60	61-120	121-180	181-240	241-300	301-360	361-420	421-480	481+	
0-19	0	0	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0	0	0	0
40-44	0	0	0	0	3	1	5	0	0	9
45-49	1	0	0	1	1	8	21	5	0	37
50-54	2	0	0	0	0	2	2	3	2	11
55-59	0	0	0	0	0	0	0	0	0	0
60-64	0	0	0	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0	0	0	0
70+	0	0	0	0	0	0	0	0	0	0
All	3	0	0	1	4	11	28	8	2	57

Age Group	Salary Range (in thousands)						All
	0-20	20-30	30-40	40-50	50-60	60+	
0-19	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0
40-44	0	0	0	0	6	3	9
45-49	0	1	0	0	12	24	37
50-54	0	0	1	1	2	7	11
55-59	0	0	0	0	0	0	0
60-64	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0
70+	0	0	0	0	0	0	0
All	0	1	1	1	20	34	57

APPENDIX C

Public Safety "A" Retirement System
Sick Leave Information
Employees Hired Between July 1, 1988 and June 30, 2001

Age Group	Service In Years							All
	0-5	6-10	11-15	16-20	21-25	26-30	31+	
0-19	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0	0
35-39	0	0	11	6	0	0	0	17
40-44	0	0	17	44	14	0	0	75
45-49	0	0	2	9	6	0	0	17
50-54	0	0	0	0	2	0	0	2
55-59	0	0	0	0	0	0	0	0
60-64	0	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0	0
70+	0	0	0	0	0	0	0	0
All	0	0	30	59	22	0	0	111

Age Group	Accumulated Sick Leave Days									All
	0-60	61-120	121-180	181-240	241-300	301-360	361-420	421-480	481+	
0-19	0	0	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0	0	0	0
35-39	0	1	0	4	10	2	0	0	0	17
40-44	0	1	2	8	37	23	4	0	0	75
45-49	0	0	0	1	6	7	3	0	0	17
50-54	0	0	0	0	0	1	1	0	0	2
55-59	0	0	0	0	0	0	0	0	0	0
60-64	0	0	0	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0	0	0	0
70+	0	0	0	0	0	0	0	0	0	0
All	0	2	2	13	53	33	8	0	0	111

Age Group	Salary Range (in thousands)						All
	0-20	20-30	30-40	40-50	50-60	60+	
0-19	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0
35-39	0	0	0	1	13	3	17
40-44	0	0	0	7	59	9	75
45-49	0	0	0	1	12	4	17
50-54	0	0	0	0	1	1	2
55-59	0	0	0	0	0	0	0
60-64	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0
70+	0	0	0	0	0	0	0
All	0	0	0	9	85	17	111

APPENDIX C

Public Safety "B" Retirement System
Sick Leave Information
All Employees

Age Group	Service In Years							
	0-5	6-10	11-15	16-20	21-25	26-30	31+	All
0-19	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0
30-34	0	22	25	0	0	0	0	47
35-39	0	21	99	2	0	0	0	122
40-44	0	11	55	1	0	0	0	67
45-49	0	2	7	1	1	0	0	11
50-54	0	0	2	0	0	1	0	3
55-59	0	0	1	0	1	0	0	2
60-64	0	0	0	1	0	0	0	1
65-69	0	0	0	0	0	0	0	0
70+	0	0	0	0	0	0	0	0
All	0	56	189	5	2	1	0	253

Age Group	Accumulated Sick Leave Days									
	0-60	61-120	121-180	181-240	241-300	301-360	361-420	421-480	481+	All
0-19	0	0	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0	0	0
30-34	3	4	35	5	0	0	0	0	0	47
35-39	0	7	49	48	18	0	0	0	0	122
40-44	2	6	24	24	10	1	0	0	0	67
45-49	0	1	3	3	4	0	0	0	0	11
50-54	1	0	0	1	0	0	0	1	0	3
55-59	0	0	0	1	1	0	0	0	0	2
60-64	0	0	0	0	1	0	0	0	0	1
65-69	0	0	0	0	0	0	0	0	0	0
70+	0	0	0	0	0	0	0	0	0	0
All	6	18	111	82	34	1	0	1	0	253

Age Group	Salary Range (in thousands)						
	0-20	20-30	30-40	40-50	50-60	60+	All
0-19	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0
30-34	0	0	0	37	10	0	47
35-39	0	0	0	73	49	0	122
40-44	0	0	0	34	33	0	67
45-49	0	0	0	4	7	0	11
50-54	0	0	0	2	0	1	3
55-59	0	0	0	0	2	0	2
60-64	0	0	0	0	1	0	1
65-69	0	0	0	0	0	0	0
70+	0	0	0	0	0	0	0
All	0	0	0	150	102	1	253

APPENDIX C

Public Safety "B" Retirement System
Sick Leave Information
Employees Hired Before July 1, 1988

Age Group	Service In Years							All
	0-5	6-10	11-15	16-20	21-25	26-30	31+	
0-19	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0	0
40-44	0	0	0	0	0	0	0	0
45-49	0	0	0	0	1	0	0	1
50-54	0	0	0	0	0	1	0	1
55-59	0	0	0	0	1	0	0	1
60-64	0	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0	0
70+	0	0	0	0	0	0	0	0
All	0	0	0	0	2	1	0	3

Age Group	Accumulated Sick Leave Days									All
	0-60	61-120	121-180	181-240	241-300	301-360	361-420	421-480	481+	
0-19	0	0	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0	0	0	0
40-44	0	0	0	0	0	0	0	0	0	0
45-49	0	0	0	0	1	0	0	0	0	1
50-54	0	0	0	0	0	0	0	1	0	1
55-59	0	0	0	1	0	0	0	0	0	1
60-64	0	0	0	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0	0	0	0
70+	0	0	0	0	0	0	0	0	0	0
All	0	0	0	1	1	0	0	1	0	3

Age Group	Salary Range (in thousands)						All
	0-20	20-30	30-40	40-50	50-60	60+	
0-19	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0
40-44	0	0	0	0	0	0	0
45-49	0	0	0	1	0	0	1
50-54	0	0	0	0	0	1	1
55-59	0	0	0	0	1	0	1
60-64	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0
70+	0	0	0	0	0	0	0
All	0	0	0	1	1	1	3

APPENDIX C

Public Safety "B" Retirement System
Sick Leave Information
Employees Hired Between July 1, 1988 and June 30, 2001

Age Group	Service In Years							All
	0-5	6-10	11-15	16-20	21-25	26-30	31+	
0-19	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0
30-34	0	22	25	0	0	0	0	47
35-39	0	21	99	2	0	0	0	122
40-44	0	11	55	1	0	0	0	67
45-49	0	2	7	1	0	0	0	10
50-54	0	0	2	0	0	0	0	2
55-59	0	0	1	0	0	0	0	1
60-64	0	0	0	1	0	0	0	1
65-69	0	0	0	0	0	0	0	0
70+	0	0	0	0	0	0	0	0
All	0	56	189	5	0	0	0	250

Age Group	Accumulated Sick Leave Days									All
	0-60	61-120	121-180	181-240	241-300	301-360	361-420	421-480	481+	
0-19	0	0	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0	0	0
30-34	3	4	35	5	0	0	0	0	0	47
35-39	0	7	49	48	18	0	0	0	0	122
40-44	2	6	24	24	10	1	0	0	0	67
45-49	0	1	3	3	3	0	0	0	0	10
50-54	1	0	0	1	0	0	0	0	0	2
55-59	0	0	0	0	1	0	0	0	0	1
60-64	0	0	0	0	1	0	0	0	0	1
65-69	0	0	0	0	0	0	0	0	0	0
70+	0	0	0	0	0	0	0	0	0	0
All	6	18	111	81	33	1	0	0	0	250

Age Group	Salary Range (in thousands)						All
	0-20	20-30	30-40	40-50	50-60	60+	
0-19	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0
30-34	0	0	0	37	10	0	47
35-39	0	0	0	73	49	0	122
40-44	0	0	0	34	33	0	67
45-49	0	0	0	3	7	0	10
50-54	0	0	0	2	0	0	2
55-59	0	0	0	0	1	0	1
60-64	0	0	0	0	1	0	1
65-69	0	0	0	0	0	0	0
70+	0	0	0	0	0	0	0
All	0	0	0	149	101	0	250

APPENDIX C

Undefined Group
Sick Leave Information
All Employees

Age Group	Service In Years							
	0-5	6-10	11-15	16-20	21-25	26-30	31+	All
0-19	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0	0
35-39	0	321	0	0	0	0	0	321
40-44	0	155	225	0	0	0	0	380
45-49	0	0	234	182	0	0	0	416
50-54	0	0	0	258	235	0	0	493
55-59	0	0	0	0	674	0	0	674
60-64	0	0	0	0	573	0	0	573
65-69	0	0	0	0	185	0	0	185
70+	0	0	0	0	72	10	4	86
All	0	476	459	440	1,739	10	4	3,128

Age Group	Accumulated Sick Leave Days									
	0-60	61-120	121-180	181-240	241-300	301-360	361-420	421-480	481+	All
0-19	0	0	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0	0	0	0
35-39	321	0	0	0	0	0	0	0	0	321
40-44	380	0	0	0	0	0	0	0	0	380
45-49	149	267	0	0	0	0	0	0	0	416
50-54	0	493	0	0	0	0	0	0	0	493
55-59	0	400	274	0	0	0	0	0	0	674
60-64	0	225	348	0	0	0	0	0	0	573
65-69	0	185	0	0	0	0	0	0	0	185
70+	0	48	34	3	1	0	0	0	0	86
All	850	1,618	656	3	1	0	0	0	0	3,128

Age Group	Salary Range (in thousands)						
	0-20	20-30	30-40	40-50	50-60	60+	All
0-19	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0
35-39	321	0	0	0	0	0	321
40-44	380	0	0	0	0	0	380
45-49	416	0	0	0	0	0	416
50-54	493	0	0	0	0	0	493
55-59	674	0	0	0	0	0	674
60-64	573	0	0	0	0	0	573
65-69	185	0	0	0	0	0	185
70+	86	0	0	0	0	0	86
All	3,128	0	0	0	0	0	3,128

APPENDIX C

Undefined Group
Sick Leave Information
Employees Hired Before July 1, 1988

Age Group	Service In Years							All
	0-5	6-10	11-15	16-20	21-25	26-30	31+	
0-19	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0	0
40-44	0	0	0	0	0	0	0	0
45-49	0	0	0	0	0	0	0	0
50-54	0	0	0	0	235	0	0	235
55-59	0	0	0	0	674	0	0	674
60-64	0	0	0	0	573	0	0	573
65-69	0	0	0	0	185	0	0	185
70+	0	0	0	0	72	10	4	86
All	0	0	0	0	1,739	10	4	1,753

Age Group	Accumulated Sick Leave Days									All
	0-60	61-120	121-180	181-240	241-300	301-360	361-420	421-480	481+	
0-19	0	0	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0	0	0	0
40-44	0	0	0	0	0	0	0	0	0	0
45-49	0	0	0	0	0	0	0	0	0	0
50-54	0	235	0	0	0	0	0	0	0	235
55-59	0	400	274	0	0	0	0	0	0	674
60-64	0	225	348	0	0	0	0	0	0	573
65-69	0	185	0	0	0	0	0	0	0	185
70+	0	48	34	3	1	0	0	0	0	86
All	0	1,093	656	3	1	0	0	0	0	1,753

Age Group	Salary Range (in thousands)						All
	0-20	20-30	30-40	40-50	50-60	60+	
0-19	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0
40-44	0	0	0	0	0	0	0
45-49	0	0	0	0	0	0	0
50-54	235	0	0	0	0	0	235
55-59	674	0	0	0	0	0	674
60-64	573	0	0	0	0	0	573
65-69	185	0	0	0	0	0	185
70+	86	0	0	0	0	0	86
All	1,753	0	0	0	0	0	1,753

APPENDIX C

Undefined Group
Sick Leave Information
Employees Hired Between July 1, 1988 and June 30, 1991

Age Group	Service In Years							All
	0-5	6-10	11-15	16-20	21-25	26-30	31+	
0-19	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0	0
40-44	0	0	0	0	0	0	0	0
45-49	0	0	0	0	0	0	0	0
50-54	0	0	0	258	0	0	0	258
55-59	0	0	0	0	0	0	0	0
60-64	0	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0	0
70+	0	0	0	0	0	0	0	0
All	0	0	0	258	0	0	0	258

Age Group	Accumulated Sick Leave Days									All
	0-60	61-120	121-180	181-240	241-300	301-360	361-420	421-480	481+	
0-19	0	0	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0	0	0	0
40-44	0	0	0	0	0	0	0	0	0	0
45-49	0	0	0	0	0	0	0	0	0	0
50-54	0	258	0	0	0	0	0	0	0	258
55-59	0	0	0	0	0	0	0	0	0	0
60-64	0	0	0	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0	0	0	0
70+	0	0	0	0	0	0	0	0	0	0
All	0	258	0	0	0	0	0	0	0	258

Age Group	Salary Range (in thousands)						All
	0-20	20-30	30-40	40-50	50-60	60+	
0-19	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0
40-44	0	0	0	0	0	0	0
45-49	0	0	0	0	0	0	0
50-54	258	0	0	0	0	0	258
55-59	0	0	0	0	0	0	0
60-64	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0
70+	0	0	0	0	0	0	0
All	258	0	0	0	0	0	258

APPENDIX C

Undefined Group
Sick Leave Information
Employees Hired Between July 1, 1991 and June 30, 2001

Age Group	Service In Years							All
	0-5	6-10	11-15	16-20	21-25	26-30	31+	
0-19	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0	0
35-39	0	321	0	0	0	0	0	321
40-44	0	155	225	0	0	0	0	380
45-49	0	0	234	182	0	0	0	416
50-54	0	0	0	0	0	0	0	0
55-59	0	0	0	0	0	0	0	0
60-64	0	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0	0
70+	0	0	0	0	0	0	0	0
All	0	476	459	182	0	0	0	1,117

Age Group	Accumulated Sick Leave Days									All
	0-60	61-120	121-180	181-240	241-300	301-360	361-420	421-480	481+	
0-19	0	0	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0	0	0	0
35-39	321	0	0	0	0	0	0	0	0	321
40-44	380	0	0	0	0	0	0	0	0	380
45-49	149	267	0	0	0	0	0	0	0	416
50-54	0	0	0	0	0	0	0	0	0	0
55-59	0	0	0	0	0	0	0	0	0	0
60-64	0	0	0	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0	0	0	0
70+	0	0	0	0	0	0	0	0	0	0
All	850	267	0	0	0	0	0	0	0	1,117

Age Group	Salary Range (in thousands)						All
	0-20	20-30	30-40	40-50	50-60	60+	
0-19	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0
35-39	321	0	0	0	0	0	321
40-44	380	0	0	0	0	0	380
45-49	416	0	0	0	0	0	416
50-54	0	0	0	0	0	0	0
55-59	0	0	0	0	0	0	0
60-64	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0
70+	0	0	0	0	0	0	0
All	1,117	0	0	0	0	0	1,117

Appendix D

Projected Sick Leave Days at Retirement by Plans and Years

This section is a summary of the projected days of sick leave for the employees who were hired before July 1, 2001. These reports present the year the employees are expected to retire, the projected number of sick leave days these employees would have as of this date and the average sick leave days per person. The projection for all employees, as well as the projection separated by plan, is presented for years 2010 through 2037.

In order to project the current employee's expected retirement date and number of sick leave days, we first sorted the employees by plan. Based on each plan's specific criteria for achieving normal and reduced retirement benefits, we selected the earliest possible retirement year for each employee utilizing their specific age and years of service. To project the number of sick leave days at retirement, historical accumulation rates were determined. The sick balance for each employee as of June 30, 2009, divided by the current years of service provided an annual accumulation rate. Based on this rate, the sick balances were projected forward to the expected retirement date.

**All Employees
(Hired before July 1, 2001)**

<u>Year of Retirement</u>	<u>Total Eligible Employees</u>	<u>Total Projected Sick Leave Days</u>	<u>Average Sick Leave Days Per Employees</u>
2010	13,586	2,541,314	1,499
2011	2,762	454,945	1,106
2012	2,713	432,425	1,134
2013	2,618	407,934	1,095
2014	2,488	386,122	1,468
2015	2,210	343,239	1,469
2016	2,079	321,775	1,478
2017	1,997	298,633	1,390
2018	1,860	281,272	1,465
2019	1,643	247,074	1,495
2020	1,677	249,568	1,433
2021	1,568	231,541	1,157
2022	1,408	206,562	1,122
2023	1,272	185,122	1,195
2024	1,269	192,298	1,090
2025	1,176	161,976	1,121
2026	1,116	162,910	1,159
2027	1,067	151,032	1,135
2028	900	125,097	1,319
2029	913	124,515	1,281
2030	749	102,158	1,171
2031	685	85,587	838
2032	768	93,077	681
2033	220	28,313	554
2034	112	14,675	370
2035	43	5,837	321
2036	8	643	107
2037	12	1,796	150
Total	48,919	7,837,443	160

**Public Employees' Retirement System
(Hired before July 1, 2001)**

<u>Year of Retirement</u>	<u>Total Eligible Employees</u>	<u>Total Projected Sick Leave Days</u>	<u>Average Sick Leave Days Per Employees</u>
2010	3,289	654,928	199
2011	818	140,239	171
2012	779	125,685	161
2013	711	119,793	168
2014	681	114,437	168
2015	550	89,437	163
2016	461	71,384	155
2017	478	73,838	154
2018	485	75,237	155
2019	411	69,222	168
2020	450	68,058	151
2021	407	63,891	157
2022	422	64,514	153
2023	371	61,379	165
2024	394	64,023	162
2025	342	53,731	157
2026	314	52,461	167
2027	276	46,159	167
2028	179	31,848	178
2029	145	25,232	174
2030	70	13,666	195
2031	31	4,516	146
2032	10	1,653	165
2033	1	160	160
Total	12,075	2,085,489	173

**Teachers' Retirement System
(Hired before July 1, 2001)**

<u>Year of Retirement</u>	<u>Total Eligible Employees</u>	<u>Total Projected Sick Leave Days</u>	<u>Average Sick Leave Days Per Employees</u>
2010	7,931	1,513,748	191
2011	1,574	258,339	164
2012	1,537	238,592	155
2013	1,515	225,220	149
2014	1,402	209,513	149
2015	1,268	189,163	149
2016	1,244	183,250	147
2017	1,176	165,392	141
2018	1,047	146,921	140
2019	943	128,337	136
2020	908	122,960	135
2021	828	107,129	129
2022	694	89,404	129
2023	633	75,213	119
2024	637	82,334	129
2025	603	69,334	115
2026	570	65,238	114
2027	578	66,713	115
2028	535	57,089	107
2029	567	61,292	108
2030	503	56,767	113
2031	483	54,042	112
2032	478	53,522	112
2033	194	22,625	117
2034	101	11,896	118
2035	39	5,075	130
2036	7	625	89
2037	12	1,796	150
Total	28,007	4,261,531	152

**Teachers' Defined Contribution Retirement System
(Hired before June 30, 2001)**

<u>Year of Retirement</u>	<u>Total Eligible Employees</u>	<u>Total Projected Sick Leave Days</u>	<u>Average Sick Leave Days Per Employees</u>
2010	46	5,914	129
2011	9	765	85
2012	11	1,035	94
2013	18	2,597	144
2014	15	1,935	129
2015	16	2,459	154
2016	12	2,401	200
2017	19	3,039	160
2018	13	2,031	156
2019	13	2,166	167
2020	20	2,936	147
2021	6	1,277	213
2022	9	1,186	132
2023	9	1,776	197
2024	9	988	110
2025	16	2,894	181
2026	8	1,176	147
2027	10	1,505	150
2028	4	713	178
2029	10	1,430	143
2030	11	1,576	143
2031	4	1,036	259
2032	2	125	62
2033	2	83	41
Total	292	43,042	147

TIAA - CREF
(Hired before June 30, 2001)

<u>Year of Retirement</u>	<u>Total Eligible Employees</u>	<u>Total Projected Sick Leave Days</u>	<u>Average Sick Leave Days Per Employees</u>
2010	1,456	244,577	168
2011	226	35,023	155
2012	224	35,325	158
2013	235	35,489	151
2014	233	35,200	151
2015	220	34,060	155
2016	210	35,652	170
2017	206	36,220	176
2018	189	29,182	154
2019	180	33,097	184
2020	171	29,205	171
2021	181	29,330	162
2022	178	32,184	181
2023	158	27,619	175
2024	122	22,417	184
2025	111	17,571	158
2026	123	24,985	203
2027	116	22,040	190
2028	93	19,138	206
2029	114	24,182	212
2030	85	17,036	200
2031	76	16,495	217
2032	48	10,713	223
2033	23	5,445	237
2034	11	2,779	253
2035	4	761	190
2036	1	18	18
Total	4,994	855,743	171

**Great West
(Hired before June 30, 2001)**

<u>Year of Retirement</u>	<u>Total Eligible Employees</u>	<u>Total Projected Sick Leave Days</u>	<u>Average Sick Leave Days Per Employees</u>
2010			
2011			
2012			
2013			
2014			
2015			
2016			
2017			
2018			
2019			
2020			
2021			
2022	1	34	34
2023			
2024			
2025			
2026			
2027			
2028	1	120	120
Total	2	154	77

**Troopers Plan A
(Hired before July 1, 2001)**

<u>Year of Retirement</u>	<u>Total Eligible Employees</u>	<u>Total Projected Sick Leave Days</u>	<u>Average Sick Leave Days Per Employees</u>
2010	18	6,692	372
2011	13	5,266	405
2012	21	8,391	400
2013	6	1,857	309
2014	12	4,460	372
2015	20	7,804	390
2016	23	8,826	384
2017	6	2,177	363
2018	25	10,307	412
2019	5	1,814	363
2020	19	7,130	375
Total	168	64,724	385

Troopers Plan B
(Hired before July 1, 2001)

<u>Year of Retirement</u>	<u>Total Eligible Employees</u>	<u>Total Projected Sick Leave Days</u>	<u>Average Sick Leave Days Per Employees</u>
2010	3	914	305
2011			
2012			
2013			
2014	1	358	358
2015	3	939	313
2016	5	1,351	270
2017	1	236	236
2018	6	1,675	279
2019	7	2,515	359
2020	28	9,225	329
2021	46	16,790	365
2022	22	7,794	354
2023	17	6,618	389
2024	38	15,025	395
2025	23	9,043	393
2026	23	9,223	401
2027	13	4,956	381
2028	15	5,821	388
2029	1	488	488
2030	1	357	357
Total	253	93,328	369

**Undefined Group
(Hired before July 1, 2001)**

<u>Year of Retirement</u>	<u>Total Eligible Employees</u>	<u>Total Projected Sick Leave Days</u>	<u>Average Sick Leave Days Per Employees</u>
2010	843	114,540	136
2011	122	15,313	126
2012	141	23,398	166
2013	133	22,979	173
2014	144	20,219	140
2015	133	19,377	146
2016	124	18,912	153
2017	111	17,731	160
2018	95	15,920	168
2019	84	9,924	118
2020	81	10,054	124
2021	100	13,125	131
2022	82	11,445	140
2023	84	12,517	149
2024	69	7,510	109
2025	81	9,404	116
2026	78	9,827	126
2027	74	9,659	131
2028	73	10,369	142
2029	76	11,892	156
2030	79	12,756	161
2031	91	9,498	104
2032	230	27,065	118
Total	3,128	433,432	139

**APPENDIX E
OPEB**

Retiree Premium Subsidy

<u>MEDICAL ONLY</u>	Count	AAL	NPV	Cashflow				
				2010	2011	2012	2013	2014
PERS	21,702	\$854,202,771	\$1,572,725,451	\$1,080,767	\$2,228,881	\$3,623,874	\$5,361,885	\$7,448,622
Troopers A	168	30,743,741	38,013,418	34,825	105,268	133,542	240,271	306,976
Troopers B	479	19,803,577	54,813,350	1,073	1,195	3,569	7,221	9,013
TRS Pre 6/30/1991	19,886	1,838,305,949	2,234,260,438	4,700,207	9,469,209	14,930,619	21,112,840	28,188,738
TRS-Post 7/1/1991	29,083	1,010,644,043	2,620,186,573	114,761	262,480	464,718	1,157,970	2,232,556
Undefined Group Pre 6/30/1991	2,011	142,069,030	172,279,478	518,852	1,067,707	1,629,356	2,242,253	2,873,044
Undefined Group Post 7/1/1991	1,832	66,929,101	170,504,425	11	27	44	269	489
Local Agencies	12,753	682,234,839	1,248,410,132	848,090	1,538,202	3,284,649	4,837,915	6,361,723
Retiree	34,583	2,196,050,132	2,196,050,132	99,134,355	102,854,234	106,943,464	111,540,331	116,448,852
<u>Retiree - Non Par</u>	<u>13</u>	<u>439,111</u>	<u>439,111</u>	<u>38,639</u>	<u>38,667</u>	<u>38,633</u>	<u>38,525</u>	<u>38,330</u>
Total	122,510	\$6,841,422,293	\$10,307,682,509	\$106,471,579	\$117,565,870	\$131,052,469	\$146,539,481	\$163,908,343

LIFE ONLY

PERS	2,628	\$11,383,465	\$25,403,868	\$9,443	\$20,963	\$36,237	\$55,870	\$81,339
Troopers A	12	204,423	250,384	79	731	769	3,085	3,381
Troopers B	61	306,237	852,668	-	-	-	-	-
TRS Pre 6/30/1991	2,328	30,792,101	38,496,708	63,068	130,983	210,480	301,280	411,796
TRS-Post 7/1/1991	5,798	32,172,242	88,741,790	6,521	14,418	24,402	47,777	82,688
Undefined Group Pre 6/30/1991	420	4,648,339	5,666,816	23,380	41,117	60,545	80,693	103,139
Undefined Group Post 7/1/1991	402	2,752,186	7,009,685	-	-	-	-	-
<u>Local Agencies</u>	<u>1,724</u>	<u>14,054,691</u>	<u>26,846,340</u>	<u>26,032</u>	<u>43,186</u>	<u>75,283</u>	<u>105,125</u>	<u>133,188</u>
Total	13,373	\$96,313,684	\$193,268,260	\$128,523	\$251,397	\$407,717	\$593,830	\$815,531

Sick & Annual Leave (Medical)

PERS	Before 7/1/1988		\$67,921,000	\$683,569	\$1,454,273	\$2,256,317	\$3,042,389	\$3,800,374
	7/1/1988-6/30/2001	\$93,813,877	62,128,000	944,868	1,743,501	2,473,718	2,979,874	3,371,880
Troopers A	Before 7/1/1988	-	-	-	-	-	-	-
	7/1/1988-6/30/2001	-	-	-	-	-	-	-
Troopers B	Before 7/1/1988		72,000	-	-	-	-	-
	7/1/1988-6/30/2001	357,515	681,000	-	-	-	-	-
TRS Pre 6/30/1991	Before 7/1/1988		160,243,000	1,106,780	2,471,889	4,078,129	5,846,497	7,643,208
	7/1/1988-6/30/1991	180,599,852	7,829,000	56,787	102,224	136,829	157,333	186,373
TRS Post 7/1/1991	7/1/1991-6/30/2001		91,849,000	883,766	1,456,398	1,902,232	2,197,869	2,479,550
Plan D 6/30/1991	Before 7/1/1988		1,739,000	10,339	15,408	26,461	35,951	50,905
	7/1/1988-6/30/1991	2,622,194	430,000	2,073	4,642	9,152	10,279	10,569
Plan D 7/1/1991	7/1/1991-6/30/2001		1,858,000	25,128	41,289	53,839	55,618	55,746
Plan F 6/30/1991	Before 7/1/1988		40,633,000	740,946	1,386,971	1,988,359	2,492,932	2,949,368
	7/1/1988-6/30/1991	57,215,078	8,053,000	103,160	173,651	244,251	300,034	334,156
Plan F 7/1/1991	7/1/1991-6/30/2001		33,427,000	463,356	822,840	1,019,812	1,054,762	1,076,446
Plan X Pre 6/30/1991	Before 7/1/1988		22,135,000	813,591	1,367,050	1,886,101	2,025,008	2,184,052
	7/1/1988-6/30/1991	24,537,279	2,282,000	-	-	-	-	-
<u>Plan X Post 7/1/1991</u>	<u>7/1/1991-6/30/2001</u>		10,600,000	-	-	-	-	-
Plan G Pre 6/30/1991	Before 7/1/1988		-	-	-	-	-	-
	7/1/1988-6/30/1991	1,229	-	-	-	-	-	-
Plan G Post 7/1/1991	7/1/1991-6/30/2001		3,000	-	-	-	-	-
<u>Local</u>		<u>29,167,682</u>	<u>45,429,336</u>	<u>337,490</u>	<u>708,636</u>	<u>1,120,800</u>	<u>1,549,387</u>	<u>1,922,023</u>
Total		\$388,314,707	\$557,312,336	\$6,171,853	\$11,748,771	\$17,196,001	\$21,747,932	\$26,064,649

Current Retirees Medical Total

\$84,190,000 \$84,190,000 \$17,052,250 \$17,276,144 \$16,481,189 \$14,272,660 \$10,701,168

TOTAL MEDICAL

\$7,410,240,684 \$11,142,453,105 \$129,824,204 \$146,842,182 \$165,137,376 \$183,153,903 \$201,489,692

Sick & Annual Leave (Annuity)

PERS	Before 7/1/1988		\$47,850,000	\$581,126	\$1,022,070	\$1,440,862	\$1,822,616	\$2,151,886
	7/1/1988-6/30/2001	\$69,883,704	43,967,000	139,402	252,199	360,973	475,230	584,532
Troopers A	Before 7/1/1988		9,630,000	56,286	138,921	173,267	276,226	325,020
	7/1/1988-6/30/2001	20,210,488	15,940,000	4,617	9,450	10,465	21,612	42,247
Troopers B	Before 7/1/1988		157,000	2,113	2,115	9,046	9,063	9,073
	7/1/1988-6/30/2001	6,857,647	14,676,000	-	3,271	3,258	3,240	3,214
TRS Pre 6/30/1991	Before 7/1/1988		239,891,000	2,653,239	4,878,272	6,958,828	8,884,603	10,605,907
	7/1/1988-6/30/1991	231,416,390	24,327,000	67,968	133,632	204,650	280,464	357,291
TRS Post 7/1/1991	7/1/1991-6/30/2001		-	-	-	-	-	-
Plan D 6/30/1991	Before 7/1/1988		-	-	-	-	-	-
	7/1/1988-6/30/1991	-	-	-	-	-	-	-
Plan D 7/1/1991	7/1/1991-6/30/2001		-	-	-	-	-	-
Plan F 6/30/1991	Before 7/1/1988		-	-	-	-	-	-
	7/1/1988-6/30/1991	-	-	-	-	-	-	-
Plan F 7/1/1991	7/1/1991-6/30/2001		-	-	-	-	-	-
Plan X Pre 6/30/1991	Before 7/1/1988		-	-	-	-	-	-
	7/1/1988-6/30/1991	-	-	-	-	-	-	-
Plan X Post 7/1/1991	7/1/1991-6/30/2001		-	-	-	-	-	-
Plan G Pre 6/30/1991	Before 7/1/1988		-	-	-	-	-	-
	7/1/1988-6/30/1991	2,744	-	-	-	-	-	-
<u>Plan G Post 7/1/1991</u>	<u>7/1/1991-6/30/2001</u>		9,000	-	-	-	-	-
TOTAL ANNUITY		\$328,370,974	\$396,447,000	\$3,504,751	\$6,439,930	\$9,161,350	\$11,773,053	\$14,079,169

**APPENDIX E
OPEB**

Retiree Premium Subsidy

<u>MEDICAL ONLY</u>	Count	AAL	NPV	Cashflow				
				2015	2016	2017	2018	2019
PERS	21,702	\$854,202,771	\$1,572,725,451	\$9,905,912	\$12,879,047	\$16,274,328	\$20,342,253	\$24,960,821
Troopers A	168	30,743,741	38,013,418	475,574	624,178	729,013	821,809	1,091,464
Troopers B	479	19,803,577	54,813,350	9,678	12,116	15,293	23,641	36,211
TRS Pre 6/30/1991	19,886	1,838,305,949	2,234,260,438	36,059,345	44,533,416	53,924,205	63,774,321	74,356,650
TRS-Post 7/1/1991	29,083	1,010,644,043	2,620,186,573	3,755,603	5,710,866	8,077,569	11,861,436	16,547,933
Undefined Group Pre 6/30/1991	2,011	142,069,030	172,279,478	3,602,187	4,388,333	5,229,652	6,139,190	7,107,858
Undefined Group Post 7/1/1991	1,832	66,929,101	170,504,425	901	24,656	86,560	251,649	452,620
Local Agencies	12,753	682,234,839	1,248,410,132	8,058,593	10,090,239	12,603,178	15,539,146	19,223,894
Retiree	34,583	2,196,050,132	2,196,050,132	121,183,765	125,769,891	130,207,099	134,443,208	138,522,633
<u>Retiree - Non Par</u>	<u>13</u>	<u>439,111</u>	<u>439,111</u>	<u>37,868</u>	<u>37,134</u>	<u>36,130</u>	<u>34,863</u>	<u>33,344</u>
Total	122,510	\$6,841,422,293	\$10,307,682,509	\$183,089,428	\$204,069,874	\$227,183,028	\$253,231,516	\$282,333,428

LIFE ONLY

PERS	2,628	\$11,383,465	\$25,403,868	\$112,207	\$153,057	\$199,864	\$255,837	\$324,449
Troopers A	12	204,423	250,384	3,677	5,172	5,541	6,408	7,483
Troopers B	61	306,237	852,668	-	349	862	375	660
TRS Pre 6/30/1991	2,328	30,792,101	38,496,708	533,149	672,616	828,722	991,660	1,166,893
TRS-Post 7/1/1991	5,798	32,172,242	88,741,790	125,999	190,237	270,283	385,737	538,003
Undefined Group Pre 6/30/1991	420	4,648,339	5,666,816	127,484	153,089	181,381	211,015	241,153
Undefined Group Post 7/1/1991	402	2,752,186	7,009,685	-	1,023	3,224	9,233	16,848
<u>Local Agencies</u>	<u>1,724</u>	<u>14,054,691</u>	<u>26,846,340</u>	<u>166,212</u>	<u>205,459</u>	<u>254,888</u>	<u>312,395</u>	<u>387,984</u>
Total	13,373	\$96,313,684	\$193,268,260	\$1,068,728	\$1,381,002	\$1,744,266	\$2,172,659	\$2,683,473

Sick & Annual Leave (Medical)

PERS	Before 7/1/1988		\$67,921,000	\$4,516,859	\$5,223,565	\$5,795,056	\$6,230,485	\$6,522,109
	7/1/1988-6/30/2001	\$93,813,877	62,128,000	3,624,609	3,784,104	3,810,664	3,863,942	3,875,766
Troopers A	Before 7/1/1988	-	-	-	-	-	-	-
	7/1/1988-6/30/2001	-	-	-	-	-	-	-
Troopers B	Before 7/1/1988		72,000	-	-	-	-	-
	7/1/1988-6/30/2001	357,515	681,000	-	-	-	-	11,667
TRS Pre 6/30/1991	Before 7/1/1988		160,243,000	9,422,052	11,236,330	13,061,196	14,722,975	16,237,661
	7/1/1988-6/30/1991	180,599,852	7,829,000	191,684	199,466	199,327	215,753	203,882
TRS Post 7/1/1991	7/1/1991-6/30/2001		91,849,000	2,731,899	3,007,678	3,318,571	3,673,579	3,959,402
Plan D 6/30/1991	Before 7/1/1988		1,739,000	62,842	83,669	109,065	146,533	162,496
	7/1/1988-6/30/1991	2,622,194	430,000	13,496	12,071	12,606	14,719	12,863
Plan D 7/1/1991	7/1/1991-6/30/2001		1,858,000	58,028	71,312	79,724	90,720	85,640
Plan F 6/30/1991	Before 7/1/1988		40,633,000	3,256,468	3,458,553	3,583,695	3,664,358	3,658,251
	7/1/1988-6/30/1991	57,215,078	8,053,000	354,472	392,232	397,699	413,206	404,619
Plan F 7/1/1991	7/1/1991-6/30/2001		33,427,000	1,168,406	1,252,174	1,316,026	1,403,913	1,502,520
Plan X Pre 6/30/1991	Before 7/1/1988		22,135,000	2,275,280	2,516,503	2,729,829	2,814,024	2,529,945
	7/1/1988-6/30/1991	24,537,279	2,282,000	-	-	-	44,683	162,890
<u>Plan X Post 7/1/1991</u>	<u>7/1/1991-6/30/2001</u>		10,600,000	-	-	-	-	-
Plan G Pre 6/30/1991	Before 7/1/1988		-	-	-	-	-	-
	7/1/1988-6/30/1991	1,229	-	-	-	-	-	-
Plan G Post 7/1/1991	7/1/1991-6/30/2001		3,000	-	-	-	-	-
<u>Local</u>		<u>29,167,682</u>	<u>45,429,336</u>	<u>2,259,181</u>	<u>2,557,366</u>	<u>2,839,938</u>	<u>3,074,436</u>	<u>3,284,456</u>
Total		\$388,314,707	\$557,312,336	\$29,935,278	\$33,795,023	\$37,253,396	\$40,373,327	\$42,614,167

Current Retirees Medical Total

\$84,190,000 \$84,190,000 \$6,754,036 \$4,198,021 \$2,587,499 \$1,612,916 \$1,024,475

TOTAL MEDICAL

\$7,410,240,684 \$11,142,453,105 \$220,847,470 \$243,443,920 \$268,768,189 \$297,390,418 \$328,655,543

Sick & Annual Leave (Annuity)

PERS	Before 7/1/1988		\$47,850,000	\$2,451,848	\$2,711,140	\$2,919,132	\$3,098,131	\$3,237,835
	7/1/1988-6/30/2001	\$69,883,704	43,967,000	686,628	794,266	895,314	1,008,084	1,125,166
Troopers A	Before 7/1/1988		9,630,000	349,708	372,781	399,155	422,133	442,599
	7/1/1988-6/30/2001	20,210,488	15,940,000	167,852	268,394	334,928	391,213	541,083
Troopers B	Before 7/1/1988		157,000	9,075	9,069	9,051	9,022	8,979
	7/1/1988-6/30/2001	6,857,647	14,676,000	3,182	9,656	18,960	23,450	30,213
TRS Pre 6/30/1991	Before 7/1/1988		239,891,000	12,090,704	13,325,096	14,345,567	15,172,306	15,785,796
	7/1/1988-6/30/1991	231,416,390	24,327,000	438,579	523,640	622,339	724,930	822,801
TRS Post 7/1/1991	7/1/1991-6/30/2001		-	-	-	-	-	-
Plan D 6/30/1991	Before 7/1/1988		-	-	-	-	-	-
	7/1/1988-6/30/1991	-	-	-	-	-	-	-
Plan D 7/1/1991	7/1/1991-6/30/2001		-	-	-	-	-	-
Plan F 6/30/1991	Before 7/1/1988		-	-	-	-	-	-
	7/1/1988-6/30/1991	-	-	-	-	-	-	-
Plan F 7/1/1991	7/1/1991-6/30/2001		-	-	-	-	-	-
Plan X Pre 6/30/1991	Before 7/1/1988		-	-	-	-	-	-
	7/1/1988-6/30/1991	-	-	-	-	-	-	-
Plan X Post 7/1/1991	7/1/1991-6/30/2001		-	-	-	-	-	-
Plan G Pre 6/30/1991	Before 7/1/1988		-	-	-	-	-	-
	7/1/1988-6/30/1991	2,744	-	-	-	-	-	-
<u>Plan G Post 7/1/1991</u>	<u>7/1/1991-6/30/2001</u>		9,000	-	-	-	-	-
TOTAL ANNUITY		\$328,370,974	\$396,447,000	\$16,197,577	\$18,014,042	\$19,544,447	\$20,849,269	\$21,994,472

Appendix F

Alternative Scenario

To assist the state in planning, CCRC Actuaries has developed a fully funded scenario which calculates the GASB 43 and 45 OPEB Liability. The scenario represents the results when the liability for the OPEB and the Sick and Annual Leave Calculations were performed with a 7% discount rate. All other assumptions have remained consistent with the baseline study.

7% Discount - Annual Required Contribution FY 2010 (“ARC”)	
<i>(in thousands)</i>	
Normal Cost Component	
Normal Cost	\$159,169
Interest	11,142
Total Normal Cost	\$170,310
Amortization Component	
AAL	\$4,455,811
Less: Assets	397,414
UAAL	4,058,397
Divided by PV factor	19.76
Amortization payment	205,385
Interest	14,377
Total Amortization Payment	\$219,762
Annual Required Contribution	\$390,073