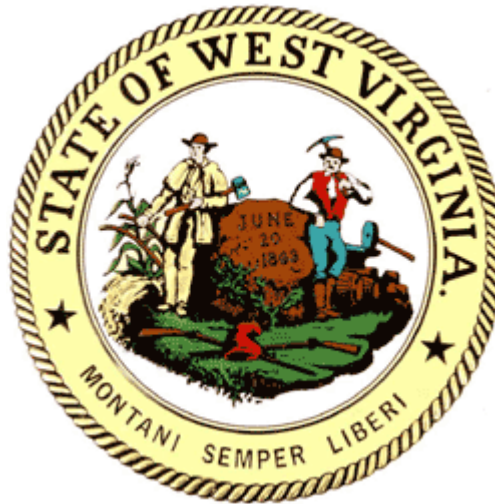




CCRC
Actuarial Services, LLC

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, 2013

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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 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, 2013.

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 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, 2013. 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 (“TDCRS”), Teachers’ Insurance and Annuity Association and College Retirement Equities Fund (“TIAA-CREF”), 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”). Health care expenditures are expected to grow at an average rate of 5.8% over the next ten years. Federal, state, and local government sponsored health care expenditures grew 3.2% in 2012, down from 4.5% in 2011. State and local spending grew 8.8% while Federal spending remained essentially flat. This is generally because of decreased federal funding of state Medicaid programs. Government health costs are expected to increase to approximately 50% of national health expenditures by 2022, primarily driven by Medicaid expansion, Medicare enrollment growth, and health insurance marketplace premium and cost-sharing subsidies.

As a share of the economy, healthcare has risen from 7.2% of GDP in 1965 to over 18% of GDP today, and it is projected to reach approximately 20% of GDP in 2022.

<i>In \$Trillions</i>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>
National Health Expenditures	\$2.9	\$3.1	\$3.3	\$3.5	\$3.7	\$3.9	\$4.1	\$4.4	\$4.7	\$5.0
Gross Domestic Product	\$16.2	\$16.9	\$17.8	\$18.8	\$19.9	\$21.0	\$22.0	\$23.0	\$24.1	\$25.2
NHE as a percent of GDP	18.0%	18.3%	18.4%	18.4%	18.4%	18.5%	18.8%	19.2%	19.5%	19.9%

**from CMS National Health Expenditure Projections 2012-2022*

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 in the future on behalf of 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 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, 2013

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 and the funded status of the retirement plan.

GASB 43 and GASB 45 Key Results	
	<i>(in thousands)</i>
FY 2013 ARC	227,211
6/30/2013 AAL	3,262,553
FY 2014 ARC	196,241
FY 2014 Annual Billed OPEB Cost	229,414
NOO 6/30/2014	2,748,004
FY 2014 ARC	196,241
6/30/2014 AAL	3,426,200
FY 2015 ARC	269,538
FY 2015 Annual OPEB Cost	298,240
NOO 6/30/2015	2,893,059
FY 2015 ARC	269,538
6/30/2015 AAL	3,585,500
FY 2016 ARC	290,754
FY 2016 Annual OPEB Cost	314,888
NOO 6/30/2016	3,021,358

Net OPEB Obligation	
<i>(in thousands)</i>	
NOO 6/30/2012	2,627,653
FY 2013 Billed Annual OPEB Cost	227,211
7/1/2012 - 6/30/2013 Contributions	<u>(171,221)</u>
NOO 6/30/2013	2,683,643

Net OPEB Obligation	
<i>(in thousands)</i>	
NOO 6/30/2013	2,683,643
FY 2014 Billed Annual OPEB Cost	229,414
7/1/2013 - 6/30/2014 Contributions	<u>(165,054)</u>
NOO 6/30/2014	2,748,004

Net OPEB Obligation	
<i>(in thousands)</i>	
NOO 6/30/2014	2,748,004
FY 2015 Annual OPEB Cost	298,240
7/1/2014 - 6/30/2015 Contributions	<u>(153,185)</u>
NOO 6/30/2015	2,893,059

Net OPEB Obligation	
<i>(in thousands)</i>	
NOO 6/30/2015	2,893,059
FY 2016 Annual OPEB Cost	314,888
7/1/2015 - 6/30/2016 Contributions	<u>(186,589)</u>
NOO 6/30/2016	3,021,358

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 regulations do not require any employer funding and allows the State to continue the 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 the difference between the AAL calculated as of June 30, 2011 and the AAL calculated as of June 30, 2013. Each cause is listed along with the impact on the AAL.

	<u>AAL</u>	<u>Change in AAL</u>	<u>Pct Change</u>
6/30/2011 Liability	\$3,841,243,000		
-Annual Inflation and Demographic Changes	3,485,770,000	-355,473,000	-9.3%
-Life Insurance no Longer Subsidized	3,483,542,000	-2,228,000	-0.1%
-New Mortality, Retirement, and Pay Scale Assumptions	3,485,747,000	2,205,000	0.1%
-Update to Latest Finance Board Policy	3,475,855,000	-9,892,000	-0.3%
-Change in Discount Rate from 6.1% to 6.7% Reflecting the Funding Plan	3,262,533,000	-213,302,000	-6.1%
6/30/2013 Liability	\$3,262,533,000	(\$578,690,000)	-15.1%

The change in the AAL due to annual inflation and demographic changes reflects what the AAL would have been had no assumptions changed. This step also takes into account that new hires as of July 1, 2010 are no longer eligible for subsidized retiree health benefits.

The Mortality, Retirement, Withdrawal and Pay Scale assumptions have been updated to coincide with the public pension assumptions. TRS assumptions changes were effective July 1, 2012. The interest rate used in the pension valuations remains at 7.5%.

Life Insurance benefits are no longer subsidized for retirees. Retiree Life Insurance premiums became subsidy free on July 1, 2012. Premiums charged to the retirees for Life Insurance are to remain self-sustaining for the foreseeable future.

In December of 2011 the Finance Board adopted a new policy that reduces the AAL and limits the growth of the AAL in the future. In FY 2013, the annual retiree subsidy was determined to be equivalent to \$343 per retiree per month. In future years, the annual retiree subsidy may increase each year by no more than 3% per retiree per year. In FY 2014, the subsidy is projected to have dropped to \$335 per retiree per month. Also, in conjunction with a legislative rule in February of 2012, the WVRHBT will have additional funding of \$30 million per year for 20 years, starting in Fiscal Year 2016. These policies have significantly reduced the June 30, 2013 unfunded liability.

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

- Increasing current levels of employee contributions for either current and future employees, or both.
- Changing the current retiree premium structure.
- Decreasing State contributions for retirees and/or dependents.
- Modifying the current benefit structure to reduce expenses.
- Changing the current OPEB to a defined contribution OPEB plan.
- A reduction in the growth rate of Healthcare Provider Fees.

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 Financial Board and Legislative actions. 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.
Managing Partner



Brad Paulis, A.S.A., M.A.A.A.
Partner



Chris Borcik, F.S.A., M.A.A.A.
Senior Consulting Actuary

CCRC Actuaries, LLC
415 Main Street
Reisterstown, MD 21136
410-833-4220
Report completed July 2014

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 position* 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 position* 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 2013, retiree premiums were \$78,339,397 compared to total expenses of \$205,002,377. This resulted in the State of West Virginia and Local governmental employers and employees subsidizing \$126,662,980 (61.8%) of retiree health care. The chart below summarizes the PEIA historical (Fiscal Years 2001 – 2013) and projected (Fiscal Years 2014 – 2018) 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	\$73,526,015	-40.1%
2009	\$95,679,928	30.1%
2010	\$131,636,829	37.6%
2011	\$140,792,391	7.0%
2012	\$138,377,075	-1.7%
2013	\$119,526,906	-13.6%
2014	\$148,962,713	24.6%
2015	\$159,769,847	7.3%
2016	\$178,713,402	11.9%
2017	\$197,905,400	10.7%
2018	\$224,168,599	13.3%

Under the PEIA Financial Plan adopted in December 2011, the initial annual retiree subsidy was to be equivalent to \$343 per retiree per month in FY 2013. Currently, retiree subsidy in FY2014 is expected to be \$335 per retiree per month. WVRHBT has recently experienced significant savings due to lower than expected claim costs for non-Medicare retirees as well as savings from moving the Medicare Eligible retirees to the Humana Medicare Advantage Plan effective July 1, 2012. In future years, the annual Pay-Go portion of the retiree subsidy may increase each year by a maximum of 3% per retiree per year. The current 61.8% level of retiree subsidization is projected to increase to 69.4% in 2018.

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 which is allocated to a valuation year by the Actuarial Cost Method.

To calculate the AAL for each current employee and retiree, the NPV of benefits at retirement are calculated from 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.

$\mathbf{NCCA = NCE * (1 + \text{Payroll Growth Rate})}^n$ 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 the next page.

Because the majority of the employees are members of the PERS and TRS/TDCRS plans, we have used the PERS plan for demonstration purposes. The average age of all eligible employees is 48.9 and the average years of service is 12.4. 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, 2013.
- 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 80% of the active family employees should be evaluated as family coverage at retirement, while the other 20% 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 FY2013 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 2014 Non-Medicare medical claim trend of 5.0%. Based on PEIA's prescription drug experience, the Financial Plan trend assumption for all prescription drugs coverage changed to 8.0% in FY 2014. In addition, we have assumed that trends will increase by 0.5% in each successive fiscal year of the financial plan, beginning in FY 2015.

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 2013 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 twenty five years of the projection are shown in the chart below:

Retiree Medical and Prescription Drug Trend Assumptions

	<u>Medical</u>		<u>Drugs</u>		<u>Humana</u>		<u>Total</u>
	<u>Medicare</u>	<u>Non-Medicare</u>	<u>Medicare</u>	<u>Non-Medicare</u>	<u>Capitations</u>	<u>Admin</u>	
2014	5.0%	5.0%	8.0%	8.0%	22.3%	-3.2%	14.4%
2015	5.5%	5.5%	8.5%	8.5%	3.0%	3.0%	4.6%
2016	6.0%	6.0%	9.0%	9.0%	10.6%	3.0%	8.8%
2017	7.0%	7.0%	10.0%	10.0%	12.4%	3.0%	10.2%
2018	8.0%	8.0%	11.0%	11.0%	13.5%	3.0%	11.2%
2019	8.0%	8.0%	11.0%	11.0%	13.5%	3.0%	11.4%
2020	8.0%	8.0%	11.0%	11.0%	13.5%	3.0%	11.5%
2021	8.0%	8.0%	11.0%	11.0%	13.5%	3.0%	11.5%
2022	8.0%	8.0%	11.0%	11.0%	13.5%	3.0%	11.6%
2023	8.0%	8.0%	11.0%	11.0%	13.5%	3.0%	11.6%
2024	7.5%	7.5%	10.5%	10.5%	12.5%	3.0%	10.9%
2025	7.0%	7.0%	10.0%	10.0%	11.5%	3.0%	10.1%
2026	6.5%	6.5%	9.5%	9.5%	10.5%	3.0%	9.3%
2027	6.0%	6.0%	9.0%	9.0%	9.5%	3.0%	8.6%
2028	5.5%	5.5%	8.5%	8.5%	8.5%	3.0%	7.8%
2029	5.5%	5.5%	8.0%	8.0%	7.5%	3.0%	7.1%
2030	5.5%	5.5%	7.5%	7.5%	6.5%	3.0%	6.3%
2031	5.5%	5.5%	7.0%	7.0%	5.5%	3.0%	5.7%
2032	5.5%	5.5%	6.5%	6.5%	5.5%	3.0%	5.6%
2033	5.5%	5.5%	6.0%	6.0%	5.5%	3.0%	5.5%
2034	5.5%	5.5%	5.5%	5.5%	5.5%	3.0%	5.5%
2035	5.5%	5.5%	5.5%	5.5%	5.5%	3.0%	5.5%
2036	5.5%	5.5%	5.5%	5.5%	5.5%	3.0%	5.5%
2037	5.5%	5.5%	5.5%	5.5%	5.5%	3.0%	5.5%
2038	5.5%	5.5%	5.5%	5.5%	5.5%	3.0%	5.5%

**The trend rates in 2038 were assumed for years 2039 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 November 2013. 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>Total</u>
2004	9%	2%	3%	-2%	6%
2005	6%	-2%	16%	1%	8%
2006	6%	5%	11%	17%	9%
2007	6%	1%	6%	6%	5%
2008	N/A	6%	N/A	-9%	N/A
2009	N/A	-1%	N/A	5%	N/A
2010	N/A	3%	N/A	7%	N/A
2011	N/A	3%	N/A	7%	N/A
2012	-4%	-6%	2%	8%	-2%
2013	12%	5%	-6%	-11%	0%
2014*	19%	6%	5%	-11%	2%

* Fiscal Year 2014 results are through the first five months ending November 2013.

Effective July 1, 2007, PEIA had contracted with Coventry Advantra Freedom to provide Medicare Advantage/Prescription Drug Plan (“MAPD”) Benefits to Medicare-eligible retired employees and dependents. Under this arrangement, Coventry Advantra Freedom had assumed the financial risk of providing comprehensive medical and prescription drug coverage with limited copayments. This arrangement expired on June 30, 2010. As a result, Fiscal Year 2008 through 2011 Medicare trends are not statistically credible.

Effective July 1, 2012, RHBT has contracted with Humana to provide a Medicare Advantage Plan (“Humana MAPD”) benefit to Medicare-eligible retired employees and their Medicare-eligible dependents. Under this arrangement, Humana has assumed the financial risk of providing comprehensive medical and drug coverage with limited copayments. Non-Medicare retirees will continue enrollment in PEIA's Preferred Provider Benefit or the Managed Care Option.

Current Medicare coverages are transferred from a self-insured secondary basis by RHBT to the Humana MAPD plan. However, it should be noted that new Medicare eligible retirees, who become Medicare eligible during the plan year, which ends in June, will be covered on a secondary basis by the PPB Plan until the beginning of the next plan year.

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/TDCRS, assumed compensation increases range from 3.75% to 5.25%. For Troopers Plan A and B, compensation is assumed to increase 5.0% per year for the first 2 years of service, 4.5% for the next 3 years, 4.0% for the next 5 years, and 3.25% per year thereafter.

8. Retiree Premium Inflation Assumptions

Historically, PEIA has shown modest increases in retiree premiums over the past ten years, while the underlying cost of retiree coverage has grown dramatically. Recently, WVRHBT has experience favorable trends in the latest fiscal years, with a combined medical and drug trend in FY2012 and FY2013 of -2% and 0%, respectively. This, along with the introduction of the Humana MAPD, has resulted in reduced retiree subsidy to the extent that retirees paid approximately 62% of their cost of insurance in Fiscal Year 2013. It should be further noted that the FY 2014 medical premiums remained unchanged for non-Medicare retirees and for Medicare retirees. In FY 2014 through FY 2017, 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 2014	FY 2015	FY 2016	FY 2017
Retiree Premium	\$82,307,000	\$82,501,000	\$85,239,000	\$93,304,000
Percentage	0%	0%	3%	9%

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. The unfunded rate used was 4.5% while the fully funded rate used was 7.5%. It was calculated that as of June 30, 2013 the plan is 71.8% funded based on the fund balance of \$590,229,840 and that the plan will contribute 65.6% of the ARC over the next 5 years. Therefore, the discount rate utilized in this valuation was 6.7%.

10. Probability of Active Employee Choosing Healthcare at Retirement

10a. Life Only Actives

PEIA conducted an analysis that indicated that 78 out of 483 recent retirees with life only coverage as an active employee choose PEIA healthcare coverage at retirement. This represents 16.15% of retirees with a choice in this category.

As of June 30, 2013 there were 13,242 eligible 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

PEIA conducted an analysis that indicated that 9,407 out of 11,270 recent retirees with PEIA medical coverage as an active employee choose PEIA healthcare coverage at retirement. This represents 83.47% 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. The results of this methodology can be seen in the charts on pages 28 and 29.

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 80% of family coverages will remain as family coverages and 20% 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, 2013, 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. The exhibits and numbers in this report incorporate the second approach, where it is assumed that the employee will continue to accumulate Sick and Annual Leave.

For the retiree subsidy analysis, we assume no new active employees in the projection. The employees and retirees as of June 30, 2013 make up the future retirees and the corresponding liability.

14. Retiree Per Person and Policy Subsidy

Effective December of 2011, the Finance Board adopted a new policy that reduces the AAL and limits the growth of the AAL in the future. In FY 2014, the annual retiree subsidy is equivalent to \$335 per retiree per month. In future years, the annual retiree subsidy may increase each year by a maximum of 3% per retiree per year. This per retiree subsidy cost was then converted to a per capita basis in order to develop the OPEB liability.

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. As a result, Life Insurance benefits are no longer subsidized for retirees. Retiree Life Insurance premiums became subsidy free on July 1, 2012. Premiums charged to the retirees for Life Insurance are to remain self-sustaining for the foreseeable future.

15. Medical Premiums

For the purposes of the projection of program costs, we have assumed that the cost of retiree monthly premiums in Fiscal Year 2014 will be based on the current rates as illustrated in the chart below.

Fiscal Year 2014 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
Unsubsidized Premium	\$1,055	\$1,030	\$2,510	\$2,460	\$1,759	\$1,709
5 to 9	845	820	2,009	1,959	1,408	1,358
10 to 14	651	626	1,514	1,464	1,048	998
15 to 19	456	431	1,022	972	691	641
20 to 24	341	316	726	676	478	428
25 and Over	264	239	529	479	334	284

Fiscal Year 2014 Medicare Monthly Premium Rates

Years of Service	Policyholder Only		Policyholder with Non-Medicare Dependents		Policyholder with Medicare Dependents	
	Standard	Preferred	Standard	Preferred	Standard	Preferred
Unsubsidized Premium	\$437	\$412	\$1,464	\$1,414	\$900	\$850
5 to 9	398	373	1,331	1,281	819	769
10 to 14	293	268	1,002	952	592	542
15 to 19	188	163	672	622	365	315
20 to 24	126	101	474	424	228	178
25 and Over	84	59	342	292	139	89

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. CCRC Actuaries created a database using data primarily found in the June 2013 active employee and retiree billing file provided by PEIA. All primary employees listed as active that had either health care coverage or life only plans were extracted. CCRC Actuaries deleted all duplicated records based on employee identifier. Spousal information was also extracted from the billing file. Those hired after 6/30/2010 were also removed.

CPRB provided a database detailing years of service. CCRC Actuaries used CPRB Years of service (“YOS”) for policyholders whenever available. For those not found in the Department of Administration database, there was a need to generate their Sick and Annual Leave balances. CCRC Actuaries 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.). The following chart illustrates the final database:

	PERS	TDCRS	TIAA-CREF	Great West	TRS	Troopers Plan A	Troopers Plan B	Undefined Group	Total
Pre 7/1/88	2,557	23	1,362	0	7,107	18	1	687	11,755
7/1/88-6/30/91	933	14	511	0	2,088	32	3	212	3,793
7/1/91-6/30/01	5,297	80	1,984	5	7,606	56	236	533	15,797
Post 6/30/01	10,312	179	4,731	121	16,281	1	244	1,716	33,585
Total	19,099	296	8,588	126	33,082	107	484	3,148	64,930

Retiree Data Analysis

The current retiree data was extracted from the June 2013 billing file provided by PEIA. Included in that database was information on 38,692 retirees. Of those retirees, there were 17,495 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 TDCRS, 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 TDCRS, 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, 2013, employees of the State of West Virginia will have accrued 4,345,940 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	577,831	2,557	225.98
	7/1/1988 - 6/30/2001	704,514	6,230	113.08
TDCRS	Before 7/1/1988	4,205	23	182.82
	7/1/1988 - 6/30/1991	1,508	14	107.73
	7/1/1991 - 6/30/2001	8,130	80	101.62
TIAA-CREF	Before 7/1/1988	264,398	1,362	194.13
	7/1/1988 - 6/30/1991	73,640	511	144.11
	7/1/1991 - 6/30/2001	208,144	1,984	104.91
Great West	Before 7/1/1988	0	0	0
	7/1/1988 - 6/30/1991	0	0	0
	7/1/1991 - 6/30/2001	194	5	38.81
TRS	Before 7/1/1988	1,359,630	7,107	191.31
	7/1/1988 - 6/30/1991	274,790	2,088	131.6
	7/1/1991 - 6/30/2001	639,000	7,606	84.01
Troopers Plan A	Before 7/1/1988	2,667	18	148.17
	7/1/1988 - 6/30/2001	29,888	88	339.63
Troopers Plan B	Before 7/1/1988	180	1	179.5
	7/1/1988 - 6/30/2001	56,741	239	237.41
Undefined Group	Before 7/1/1988	72,015	687	104.83
	7/1/1988 - 6/30/1991	21,676	212	102.25
	7/1/1991 - 6/30/2001	46,789	533	87.78
TOTAL		4,345,940	31,345	138.65

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, 2013 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, 2013, 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 2014 through 2042.

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, 2013 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 2013, 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 6.7% investment rate to discount the liabilities.

In the last valuation we had projected that approximately 78% of the retirees would ultimately elect the medical premium waiver. We are now projecting that approximately 61% 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 85% 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 6.7% discount rate is summarized in the following tables:

Projected PEIA Waiver Program

Plan		Number of Employees
PERS	Before 7/1/1988	1,618
	7/1/1988 – 6/30/2001	4,424
TRS/TDCRS	Before 7/1/88	3,492
	7/1/1988 – 6/30/1991	1,058
	7/1/1991 – 6/30/2001	7,606
Plan D	Before 7/1/88	23
	7/1/1988 – 6/30/1991	14
	7/1/1991 – 6/30/2001	80
Plan F	Before 7/1/88	1,362
	7/1/1988 – 6/30/1991	511
	7/1/1991 – 6/30/2001	1,984
Plan G	Before 7/1/88	0
	7/1/1988 – 6/30/1991	0
	7/1/1991 – 6/30/2001	5
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	202
Undefined Group	Before 7/1/88	687
	7/1/1988 – 6/30/1991	211
	7/1/1991 – 6/30/2001	532
Before 7/1/1988		7,182 (61%)
After 7/1/1988		16,627 (85%)
TOTAL		23,809 (76%)

Projected Annuity Increases

Plan		Number of Employees
PERS	Before 7/1/1988	932
	7/1/1988 – 6/30/2001	1,805
TRS/TDCRS	Before 7/1/88	3,613
	7/1/1988 – 6/30/1991	1,030
	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	0
Troopers Plan A	Before 7/1/1988	18
	7/1/1988 – 6/30/2001	88
Troopers Plan B	Before 7/1/1988	0
	7/1/1988 – 6/30/2001	37
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		4,564 (39%)
After 7/1/1988		2,960 (15%)
TOTAL		7,524 (24%)

SECTION VII

Retiree Subsidy – Fiscal Year 2013 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 2013, 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 2014 (“ARC”)	
<i>(in thousands)</i>	
Normal Cost Component	
Normal Cost	\$91,310
Interest	6,118
Total Normal Cost	\$97,428
Amortization Component	
AAL	\$3,262,553
Less: Assets	590,230
UAAL	2,672,323
Divided by PV factor	18.30
Amortization payment	146,009
Interest	9,783
Total Amortization Payment	\$155,792
Annual Required Contribution	\$253,220

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 the amortization of the NOO in Fiscal Years 2014, 2015, and 2016:

Annual OPEB Cost	
	<i>(in thousands)</i>
FY 2014 Billed ARC	196,241
Interest on NOO	179,804
Amortization of NOO	<u>(146,631)</u>
FY 2014 Annual OPEB Cost	229,414

Annual OPEB Cost	
	<i>(in thousands)</i>
FY 2015 ARC	269,538
Interest on NOO	184,116
Amortization of NOO	<u>(155,414)</u>
FY 2015 Annual OPEB Cost	298,240

Annual OPEB Cost	
	<i>(in thousands)</i>
FY 2016 ARC	290,754
Interest on NOO	193,835
Amortization of NOO	<u>(169,701)</u>
FY 2016 Annual OPEB Cost	314,888

The following charts show the historic NOO as of June 30, 2013 and the projected NOO as of June 30, 2014 through June 30, 2016:

Net OPEB Obligation	
	<i>(in thousands)</i>
NOO 6/30/2012	2,627,653
FY 2013 Billed Annual OPEB Cost	227,211
7/1/2012 - 6/30/2013 Contributions	<u>(171,221)</u>
NOO 6/30/2013	2,683,643

Net OPEB Obligation	
<i>(in thousands)</i>	
NOO 6/30/2013	2,683,643
FY 2014 Billed Annual OPEB Cost	229,414
7/1/2013 - 6/30/2014 Contributions	<u>(165,054)</u>
NOO 6/30/2014	2,748,004

Net OPEB Obligation	
<i>(in thousands)</i>	
NOO 6/30/2014	2,748,004
FY 2015 Annual OPEB Cost	298,240
7/1/2014 - 6/30/2015 Contributions	<u>(153,185)</u>
NOO 6/30/2015	2,893,059

Net OPEB Obligation	
<i>(in thousands)</i>	
NOO 6/30/2015	2,893,059
FY 2016 Annual OPEB Cost	314,888
7/1/2015 - 6/30/2016 Contributions	<u>(186,589)</u>
NOO 6/30/2016	3,021,358

In Fiscal Year 2014, the WVRHBT is projected to total \$286,544,000 in revenues and the chart below illustrates the source of these revenues:

Fiscal Year 2014 Contributions and Revenue Sources <i>(in thousands)</i>	
WV PEIA ARC Funding Premiums	\$160,822
Retiree Premiums - PPB	79,756
Retiree Premiums - MCO	2,551
Non Par Premiums	3,283
Annual Required Contributions	948
<u>Investment Income</u>	<u>39,182</u>
Total	\$286,544

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, 2012	
	<i>(in thousands)</i>
AAL	4,007,900
Assets	492,779
Unfunded Liability	3,515,121
Funded Ratio	12.30%

Funded Status as of June 30, 2013	
	<i>(in thousands)</i>
AAL	3,262,553
Assets	590,230
Unfunded Liability	2,672,323
Funded Ratio	18.09%

Funded Status as of June 30, 2014	
	<i>(in thousands)</i>
AAL	3,426,200
Assets	642,220
Unfunded Liability	2,783,980
Funded Ratio	18.74%

Funded Status as of June 30, 2015	
	<i>(in thousands)</i>
AAL	3,585,500
Assets	674,873
Unfunded Liability	2,910,627
Funded Ratio	18.82%

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 2013 Contributions	171,221
FY 2013 Billed ARC	227,211
Percentage of 2013 ARC Contributed	75.36%
FY 2014 Contributions	165,054
FY 2014 Billed ARC	196,241
Percentage of 2014 ARC Contributed	84.11%
FY 2015 Contributions	153,185
FY 2015 ARC	269,538
Percentage of 2015 ARC Contributed	56.83%
FY 2016 Contributions	186,589
FY 2016 ARC	290,754
Percentage of 2016 ARC Contributed	64.17%

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 \$196,241,000. This represents 5.00% 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 68.15% of the State's total covered annual payroll. In other words, if 68.15% 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 2013 Billed ARC	227,211
FY 2012 Payroll	3,755,797
6/30/2012 Unfunded Liability	3,515,121
ARC as a % of Covered Payroll	6.05%
Unfunded Liability as a % of Covered Payroll	93.59%
FY 2014 Billed ARC	196,241
FY 2013 Payroll	3,921,147
6/30/2013 Unfunded Liability	2,672,323
ARC as a % of Covered Payroll	5.00%
Unfunded Liability as a % of Covered Payroll	68.15%
FY 2015 ARC	269,538
FY 2014 Payroll	4,093,778
6/30/2014 Unfunded Liability	2,783,980
ARC as a % of Covered Payroll	6.58%
Unfunded Liability as a % of Covered Payroll	68.01%
FY 2016 ARC	290,754
FY 2015 Payroll	4,274,009
6/30/2015 Unfunded Liability	2,910,627
ARC as a % of Covered Payroll	6.80%
Unfunded Liability as a % of Covered Payroll	68.10%

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	12.00%	12.10%	0.00%	0.00%	0.04%	0.02%
20	1.06000	1.06000	12.00%	12.10%	0.00%	0.00%	0.04%	0.02%
21	1.05950	1.05950	11.52%	11.88%	0.00%	0.00%	0.04%	0.03%
22	1.05900	1.05900	11.04%	11.66%	0.00%	0.00%	0.04%	0.03%
23	1.05850	1.05850	10.56%	11.44%	0.00%	0.00%	0.04%	0.03%
24	1.05800	1.05800	10.08%	11.22%	0.00%	0.00%	0.04%	0.03%
25	1.05750	1.05750	9.60%	11.00%	0.00%	0.00%	0.05%	0.03%
26	1.05700	1.05700	9.36%	10.56%	0.00%	0.00%	0.05%	0.03%
27	1.05650	1.05650	9.12%	10.12%	0.00%	0.00%	0.05%	0.04%
28	1.05600	1.05600	8.88%	9.68%	0.00%	0.00%	0.05%	0.04%
29	1.05550	1.05550	8.64%	9.24%	0.00%	0.00%	0.06%	0.04%
30	1.05500	1.05500	8.40%	8.80%	0.00%	0.00%	0.06%	0.04%
31	1.05450	1.05450	8.04%	8.25%	0.00%	0.00%	0.06%	0.05%
32	1.05400	1.05400	7.68%	7.70%	0.00%	0.00%	0.07%	0.05%
33	1.05350	1.05350	7.32%	7.15%	0.00%	0.00%	0.07%	0.05%
34	1.05300	1.05300	6.96%	6.60%	0.00%	0.00%	0.08%	0.06%
35	1.05250	1.05250	6.60%	5.50%	0.00%	0.00%	0.09%	0.06%
36	1.05200	1.05200	6.24%	5.30%	0.00%	0.00%	0.09%	0.07%
37	1.05150	1.05150	5.88%	5.10%	0.00%	0.00%	0.10%	0.07%
38	1.05100	1.05100	5.52%	4.90%	0.00%	0.00%	0.10%	0.08%
39	1.05050	1.05050	5.16%	4.70%	0.00%	0.00%	0.11%	0.08%
40	1.05000	1.05000	4.80%	4.50%	0.00%	0.00%	0.12%	0.09%
41	1.04975	1.04975	4.56%	4.40%	0.00%	0.00%	0.14%	0.09%
42	1.04950	1.04950	4.32%	4.30%	0.00%	0.00%	0.15%	0.10%
43	1.04925	1.04925	4.08%	4.20%	0.00%	0.00%	0.17%	0.11%
44	1.04900	1.04900	3.84%	4.10%	0.00%	0.00%	0.19%	0.12%
45	1.04875	1.04875	3.60%	4.00%	0.00%	0.00%	0.22%	0.13%
46	1.04800	1.04800	3.36%	3.90%	0.00%	0.00%	0.25%	0.14%
47	1.04725	1.04725	3.12%	3.80%	0.00%	0.00%	0.28%	0.15%
48	1.04650	1.04650	2.88%	3.70%	0.00%	0.00%	0.31%	0.17%
49	1.04575	1.04575	2.64%	3.60%	0.00%	0.00%	0.35%	0.18%
50	1.04500	1.04500	2.40%	3.50%	0.00%	0.00%	0.39%	0.20%
51	1.04500	1.04500	2.16%	3.20%	0.00%	0.00%	0.43%	0.22%
52	1.04500	1.04500	1.92%	2.90%	0.00%	0.00%	0.48%	0.23%
53	1.04500	1.04500	1.68%	2.60%	0.00%	0.00%	0.52%	0.25%
54	1.04500	1.04500	1.44%	2.30%	0.00%	0.00%	0.57%	0.27%
55	1.04500	1.04500	1.20%	2.00%	25.00%	25.00%	0.61%	0.30%

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	1.20%	1.80%	15.00%	15.00%	0.66%	0.33%
57	1.04400	1.04400	1.20%	1.60%	15.00%	15.00%	0.71%	0.36%
58	1.04350	1.04350	1.20%	1.40%	15.00%	15.00%	0.77%	0.39%
59	1.04300	1.04300	1.20%	1.20%	15.00%	15.00%	0.84%	0.44%
60	1.04250	1.04250	1.20%	1.00%	15.00%	15.00%	0.92%	0.49%
61	1.04250	1.04250			15.00%	15.00%	1.01%	0.55%
62	1.04250	1.04250			30.00%	30.00%	1.11%	0.62%
63	1.04250	1.04250			18.00%	18.00%	1.24%	0.69%
64	1.04250	1.04250			18.00%	18.00%	1.39%	0.77%
65	1.04250	1.04250			25.00%	25.00%	1.56%	0.86%
66	1.04250	1.04250			20.00%	20.00%	1.76%	0.96%
67	1.04250	1.04250			20.00%	20.00%	1.98%	1.06%
68	1.04250	1.04250			20.00%	20.00%	2.22%	1.16%
69	1.04250	1.04250			20.00%	20.00%	2.48%	1.29%
70	1.04250	1.04250			100.00%	100.00%	2.75%	1.45%
71					100.00%	100.00%	3.04%	1.65%
72					100.00%	100.00%	3.34%	1.90%
73					100.00%	100.00%	3.67%	2.19%
74					100.00%	100.00%	4.04%	2.51%
75					100.00%	100.00%	4.46%	2.86%
76					100.00%	100.00%	4.94%	3.24%
77					100.00%	100.00%	5.48%	3.64%
78					100.00%	100.00%	6.07%	4.08%
79					100.00%	100.00%	6.71%	4.55%
80					100.00%	100.00%	7.41%	5.06%
81					100.00%	100.00%	8.15%	5.61%
82					100.00%	100.00%	8.93%	6.19%
83					100.00%	100.00%	9.75%	6.79%
84					100.00%	100.00%	10.60%	7.44%
85					100.00%	100.00%	11.48%	8.15%
86					100.00%	100.00%	12.42%	8.92%
87					100.00%	100.00%	13.39%	9.75%
88					100.00%	100.00%	14.41%	10.65%
89					100.00%	100.00%	15.49%	11.62%
90					100.00%	100.00%	16.63%	12.69%
91					100.00%	100.00%	17.82%	13.86%
92					100.00%	100.00%	19.05%	15.12%
93					100.00%	100.00%	20.30%	16.51%
94					100.00%	100.00%	21.79%	18.04%
95					100.00%	100.00%	23.41%	19.73%

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%	24.84%	21.61%
97					100.00%	100.00%	26.40%	23.70%
98					100.00%	100.00%	28.08%	25.81%
99					100.00%	100.00%	29.92%	28.02%
100					100.00%	100.00%	31.92%	30.47%
101							34.11%	33.16%
102							36.51%	36.14%
103							39.31%	39.42%
104							42.73%	43.04%
105							46.95%	47.15%
106							52.19%	51.92%
107							58.65%	57.50%
108							66.53%	64.03%
109							76.02%	71.69%
110							100.00%	80.63%
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>Pre-Ret. 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	1.05250	1.05250	3.20%	3.20%	0.00%	0.00%	0.03%	0.02%
20	1.05250	1.05250	3.20%	3.20%	0.00%	0.00%	0.04%	0.02%
21	1.05200	1.05200	3.12%	3.12%	0.00%	0.00%	0.04%	0.02%
22	1.05150	1.05150	3.04%	3.04%	0.00%	0.00%	0.04%	0.02%
23	1.05100	1.05100	2.96%	2.96%	0.00%	0.00%	0.04%	0.02%
24	1.05050	1.05050	2.88%	2.88%	0.00%	0.00%	0.04%	0.02%
25	1.05000	1.05000	2.80%	2.80%	0.00%	0.00%	0.04%	0.02%
26	1.04950	1.04950	2.72%	2.72%	0.00%	0.00%	0.04%	0.02%
27	1.04900	1.04900	2.64%	2.64%	0.00%	0.00%	0.04%	0.02%
28	1.04850	1.04850	2.56%	2.56%	0.00%	0.00%	0.04%	0.02%
29	1.04800	1.04800	2.48%	2.48%	0.00%	0.00%	0.04%	0.03%
30	1.04750	1.04750	2.40%	2.40%	0.00%	0.00%	0.04%	0.03%
31	1.04700	1.04700	2.36%	2.32%	0.00%	0.00%	0.05%	0.03%
32	1.04650	1.04650	2.32%	2.24%	0.00%	0.00%	0.06%	0.04%
33	1.04600	1.04600	2.28%	2.16%	0.00%	0.00%	0.06%	0.04%
34	1.04550	1.04550	2.24%	2.08%	0.00%	0.00%	0.07%	0.04%
35	1.04500	1.04500	2.20%	2.00%	0.00%	0.00%	0.08%	0.05%
36	1.04450	1.04450	2.14%	1.92%	0.00%	0.00%	0.08%	0.05%
37	1.04400	1.04400	2.08%	1.84%	0.00%	0.00%	0.09%	0.06%
38	1.04350	1.04350	2.02%	1.76%	0.00%	0.00%	0.10%	0.06%
39	1.04300	1.04300	1.96%	1.68%	0.00%	0.00%	0.10%	0.07%
40	1.04250	1.04250	1.90%	1.60%	0.00%	0.00%	0.11%	0.07%
41	1.04210	1.04210	1.84%	1.52%	0.00%	0.00%	0.11%	0.08%
42	1.04170	1.04170	1.78%	1.44%	0.00%	0.00%	0.12%	0.09%
43	1.04130	1.04130	1.72%	1.36%	0.00%	0.00%	0.13%	0.09%
44	1.04090	1.04090	1.66%	1.28%	0.00%	0.00%	0.14%	0.10%
45	1.04050	1.04050	1.60%	1.20%	0.00%	0.00%	0.15%	0.11%
46	1.04010	1.04010	1.52%	1.12%	0.00%	0.00%	0.16%	0.12%
47	1.03970	1.03970	1.44%	1.04%	0.00%	0.00%	0.17%	0.13%
48	1.03930	1.03930	1.36%	0.96%	0.00%	0.00%	0.19%	0.14%
49	1.03890	1.03890	1.28%	0.88%	0.00%	0.00%	0.20%	0.16%
50	1.03850	1.03850	1.20%	0.80%	0.00%	0.00%	0.21%	0.17%
51	1.03850	1.03850	1.28%	0.88%	0.00%	0.00%	0.23%	0.18%
52	1.03850	1.03850	1.36%	0.96%	0.00%	0.00%	0.25%	0.20%
53	1.03850	1.03850	1.44%	1.04%	0.00%	0.00%	0.26%	0.21%
54	1.03850	1.03850	1.52%	1.12%	0.00%	0.00%	0.28%	0.23%
55	1.03850	1.03850	1.60%	1.20%	25.00%	27.50%	0.30%	0.25%

Teachers' Retirement System / Teachers Defined Contribution

<u>Age</u>	<u>Salary Scale</u>		<u>Ultimate Withdrawal</u>		<u>Retirement Rates</u>		<u>Pre-Ret. 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	1.03850	1.03850	1.60%	1.20%	15.00%	17.50%	0.33%	0.28%
57	1.03850	1.03850	1.60%	1.20%	15.00%	17.50%	0.36%	0.30%
58	1.03850	1.03850	1.60%	1.20%	17.00%	18.00%	0.40%	0.33%
59	1.03850	1.03850	1.60%	1.20%	19.00%	19.00%	0.44%	0.36%
60	1.03850	1.03850	1.60%	1.20%	20.00%	25.00%	0.49%	0.39%
61	1.03850	1.03850	1.60%	1.20%	30.00%	20.00%	0.54%	0.43%
62	1.03850	1.03850	1.60%	1.20%	40.00%	27.50%	0.59%	0.47%
63	1.03850	1.03850	1.60%	1.20%	25.00%	20.00%	0.65%	0.50%
64	1.03850	1.03850	1.60%	1.20%	25.00%	25.00%	0.70%	0.54%
65	1.03850	1.03850	1.60%	1.20%	40.00%	30.00%	0.76%	0.58%
66	1.03830	1.03830	1.60%	1.20%	30.00%	30.00%	0.81%	0.62%
67	1.03810	1.03810	1.60%	1.20%	30.00%	30.00%	0.86%	0.66%
68	1.03790	1.03790	1.60%	1.20%	30.00%	30.00%	0.91%	0.70%
69	1.03770	1.03770	1.60%	1.20%	30.00%	30.00%	0.95%	0.73%
70	1.03750	1.03750			100.00%	100.00%	0.99%	0.76%
71					100.00%	100.00%	1.82%	1.65%
72					100.00%	100.00%	2.02%	1.83%
73					100.00%	100.00%	2.25%	2.00%
74					100.00%	100.00%	2.51%	2.21%
75					100.00%	100.00%	2.85%	2.39%
76					100.00%	100.00%	3.18%	2.64%
77					100.00%	100.00%	3.61%	2.96%
78					100.00%	100.00%	4.09%	3.27%
79					100.00%	100.00%	4.64%	3.61%
80					100.00%	100.00%	5.27%	3.99%
81					100.00%	100.00%	6.01%	4.41%
82					100.00%	100.00%	6.85%	4.89%
83					100.00%	100.00%	7.64%	5.43%
84					100.00%	100.00%	8.67%	6.04%
85					100.00%	100.00%	9.62%	6.87%
86					100.00%	100.00%	10.67%	7.81%
87					100.00%	100.00%	12.06%	8.89%
88					100.00%	100.00%	13.62%	9.90%
89					100.00%	100.00%	15.06%	11.22%
90					100.00%	100.00%	16.93%	12.40%
91					100.00%	100.00%	18.44%	13.62%
92					100.00%	100.00%	20.40%	14.84%
93					100.00%	100.00%	22.00%	16.37%
94					100.00%	100.00%	23.61%	17.56%
95					100.00%	100.00%	25.70%	18.69%

Teachers' Retirement System / Teachers Defined Contribution

<u>Age</u>	<u>Salary Scale</u>		<u>Ultimate Withdrawal</u>		<u>Retirement Rates</u>		<u>Pre-Ret. 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%	27.28%	19.73%
97					100.00%	100.00%	28.81%	21.10%
98					100.00%	100.00%	30.91%	21.95%
99					100.00%	100.00%	32.37%	22.68%
100					100.00%	100.00%	33.77%	23.28%
101							35.86%	24.48%
102							37.17%	25.45%
103							38.30%	26.60%
104							39.20%	27.91%
105							39.79%	29.31%
106							40.00%	30.78%
107							40.00%	32.27%
108							40.00%	33.74%
109							40.00%	35.15%
110							40.00%	36.46%
111							40.00%	37.63%
112							40.00%	38.60%
113							40.00%	39.35%
114							40.00%	39.83%
115							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 ("TDCRS") 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 6-30-2013 (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	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	2	1	0	0	0	0	0	0	3	303	101
	20,001-30,000	10	3	2	0	0	0	0	0	0	15	728	49
	30,001-40,000	13	5	5	2	0	0	0	0	0	25	1,838	74
	40,001-50,000	6	1	3	0	1	0	0	0	0	11	872	79
	50,001+	1	2	0	1	0	0	0	0	0	4	348	87
	Subtotal	30	13	11	3	1	0	0	0	0	58	4,090	71
35-39	0-20,000	23	2	0	1	0	0	0	0	0	26	967	37
	20,001-30,000	91	33	24	11	0	0	0	0	0	159	10,592	67
	30,001-40,000	142	61	31	20	3	1	0	0	0	258	17,578	68
	40,001-50,000	216	81	58	32	6	1	1	0	0	395	28,814	73
	50,001+	121	71	52	42	18	1	0	0	0	305	30,926	101
	Subtotal	593	248	165	106	27	3	1	0	0	1,143	88,877	78
40-44	0-20,000	62	7	0	0	0	0	0	0	0	69	3,132	45
	20,001-30,000	212	62	38	22	8	2	0	0	0	344	21,867	64
	30,001-40,000	297	122	101	79	19	9	1	0	0	628	56,122	89
	40,001-50,000	467	204	129	61	26	8	0	0	0	895	69,430	78
	50,001+	367	211	182	145	93	59	11	0	0	1,068	131,523	123
	Subtotal	1,405	606	450	307	146	78	12	0	0	3,004	282,073	94
45-49	0-20,000	75	51	6	0	1	0	0	0	0	133	8,247	62
	20,001-30,000	311	124	78	37	21	9	1	0	0	581	44,559	77
	30,001-40,000	409	172	141	91	59	24	10	0	0	906	90,219	100
	40,001-50,000	370	203	127	93	52	27	15	3	1	891	93,723	105
	50,001+	563	347	309	249	155	82	40	10	0	1,755	227,198	129
	Subtotal	1,728	897	661	470	288	142	66	13	1	4,266	463,946	109

APPENDIX C
Public Employee Leave Analysis
Sick Leave and Demographic Information as of 6-30-2013 (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	18	148	1	3	2	0	0	0	0	172	14,248	83
	20,001-30,000	433	188	135	84	41	14	11	7	2	915	85,883	94
	30,001-40,000	603	246	194	183	111	66	48	22	11	1,484	185,287	125
	40,001-50,000	340	202	189	124	105	67	42	32	6	1,107	162,280	147
	50,001+	800	451	441	421	323	225	96	41	13	2,811	428,759	153
	Subtotal		2,194	1,235	960	815	582	372	197	102	32	6,489	876,456
55-59	0-20,000	25	364	9	1	1	0	0	0	0	400	39,290	98
	20,001-30,000	503	236	179	110	45	24	16	6	4	1,123	109,978	98
	30,001-40,000	581	281	242	234	170	108	56	23	29	1,724	250,481	145
	40,001-50,000	362	179	176	134	104	66	52	40	42	1,155	186,100	161
	50,001+	1,007	464	512	530	439	305	213	124	88	3,682	648,638	176
	Subtotal		2,478	1,524	1,118	1,009	759	503	337	193	163	8,084	1,234,487
60-64	0-20,000	21	393	110	2	1	0	0	0	0	527	56,232	107
	20,001-30,000	329	186	153	89	47	13	8	3	7	835	88,659	106
	30,001-40,000	355	181	195	164	118	83	43	18	24	1,181	184,646	156
	40,001-50,000	197	111	107	97	81	61	39	16	40	749	137,206	183
	50,001+	785	249	325	365	315	239	174	102	161	2,715	521,344	192
	Subtotal		1,687	1,120	890	717	562	396	264	139	232	6,007	988,086
65-69	0-20,000	11	204	1	1	2	0	2	0	0	221	22,684	103
	20,001-30,000	73	43	50	35	16	6	2	5	3	233	30,990	133
	30,001-40,000	90	49	42	33	41	23	10	6	19	313	55,243	176
	40,001-50,000	63	21	22	29	22	19	13	9	15	213	41,535	195
	50,001+	243	62	75	62	72	43	46	43	74	720	144,336	200
	Subtotal		480	379	190	160	153	91	73	63	111	1,700	294,788
70+	0-20,000	10	49	29	1	3	0	0	0	1	93	10,970	118
	20,001-30,000	31	12	19	19	3	2	5	2	3	96	14,464	151
	30,001-40,000	23	10	12	18	10	8	8	6	11	106	24,681	233
	40,001-50,000	20	6	7	5	5	9	7	3	7	69	15,814	229
	50,001+	100	13	11	17	13	13	16	11	36	230	47,208	205
	Subtotal		184	90	78	60	34	32	36	22	58	594	113,137
All	0-20,000	245	1,220	157	9	10	0	2	0	1	1,644	156,075	95
	20,001-30,000	1,993	887	678	407	181	70	43	23	19	4,301	407,718	95
	30,001-40,000	2,513	1,127	963	824	531	322	176	75	94	6,625	866,095	131
	40,001-50,000	2,041	1,008	818	575	402	258	169	103	111	5,485	735,773	134
	50,001+	3,987	1,870	1,907	1,832	1,428	967	596	331	372	13,290	2,180,279	164
	Total		10,779	6,112	4,523	3,647	2,552	1,617	986	532	597	31,345	4,345,940

APPENDIX C
Public Employee Leave Analysis
Sick Leave and Demographic Information as of 6-30-2013 (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	1	0	0	0	0	0	0	0	0	1	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	1	0	0	0	0	0	0	0	0	1	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	2	0	0	0	0	0	0	0	0	2	99	49
	20,001-30,000	1	0	1	0	0	0	0	0	0	2	162	81
	30,001-40,000	2	1	3	2	0	0	0	0	0	8	1,066	133
	40,001-50,000	2	3	1	0	0	0	0	0	0	6	521	87
	50,001+	1	4	1	2	1	1	0	0	0	10	1,572	157
	Subtotal	8	8	6	4	1	1	0	0	0	28	3,420	122
45-49	0-20,000	2	3	0	0	0	0	0	0	0	5	318	64
	20,001-30,000	15	2	1	3	3	0	1	0	0	25	2,540	102
	30,001-40,000	50	9	17	10	9	13	4	0	0	112	14,247	127
	40,001-50,000	50	24	11	13	18	9	8	1	0	134	18,836	141
	50,001+	71	43	47	40	30	14	7	3	0	255	37,181	146
	Subtotal	188	81	76	66	60	36	20	4	0	531	73,121	138

APPENDIX C
Public Employee Leave Analysis
Sick Leave and Demographic Information as of 6-30-2013 (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	0	40	0	1	0	0	0	0	0	41	3,688	90
	20,001-30,000	43	21	16	24	18	6	10	7	2	147	25,029	170
	30,001-40,000	177	67	49	59	55	44	43	20	10	524	88,727	169
	40,001-50,000	114	71	78	57	57	49	32	30	6	494	92,653	188
	50,001+	415	244	256	257	219	175	84	35	13	1,698	292,077	172
	Subtotal	749	443	399	398	349	274	169	92	31	2,904	502,174	173
55-59	0-20,000	1	216	0	0	0	0	0	0	0	217	21,958	101
	20,001-30,000	60	24	24	24	15	17	13	6	4	187	31,342	168
	30,001-40,000	185	80	86	87	89	81	50	22	28	708	136,927	193
	40,001-50,000	134	64	56	56	67	43	44	40	42	546	117,483	215
	50,001+	590	267	303	353	324	241	189	123	86	2,476	493,988	200
	Subtotal	970	651	469	520	495	382	296	191	160	4,134	801,697	194
60-64	0-20,000	2	218	69	0	0	0	0	0	0	289	31,825	110
	20,001-30,000	32	25	19	24	15	6	6	3	7	137	24,132	176
	30,001-40,000	100	59	52	55	51	62	36	18	24	457	96,739	212
	40,001-50,000	66	33	36	39	40	36	32	16	40	338	82,905	245
	50,001+	469	118	171	226	221	191	153	98	159	1,806	401,831	222
	Subtotal	669	453	347	344	327	295	227	135	230	3,027	637,432	211
65-69	0-20,000	0	100	0	0	1	0	2	0	0	103	11,181	109
	20,001-30,000	8	3	1	5	3	2	1	5	3	31	7,373	238
	30,001-40,000	34	12	11	8	21	18	7	6	19	136	32,793	241
	40,001-50,000	22	4	7	11	9	12	11	9	14	99	26,294	266
	50,001+	135	23	31	27	37	29	36	42	71	431	105,912	246
	Subtotal	199	142	50	51	71	61	57	62	107	800	183,555	229
70+	0-20,000	0	30	14	0	2	0	0	0	0	46	5,554	121
	20,001-30,000	4	1	1	2	0	1	4	2	3	18	5,325	296
	30,001-40,000	10	6	5	7	5	3	6	6	11	59	16,849	286
	40,001-50,000	8	4	2	3	4	7	6	3	7	44	12,805	291
	50,001+	71	4	6	5	8	11	12	10	36	163	38,994	239
	Subtotal	93	45	28	17	19	22	28	21	57	330	79,528	241
All	0-20,000	7	607	83	1	3	0	2	0	0	703	74,622	106
	20,001-30,000	163	76	63	82	54	32	35	23	19	547	95,903	175
	30,001-40,000	559	234	223	228	230	221	146	72	92	2,005	387,349	193
	40,001-50,000	396	203	191	179	195	156	133	99	109	1,661	351,498	212
	50,001+	1,752	703	815	910	840	662	481	311	365	6,839	1,371,555	201
	Total	2,877	1,823	1,375	1,400	1,322	1,071	797	505	585	11,755	2,280,926	194

APPENDIX C
Public Employee Leave Analysis
Sick Leave and Demographic Information as of 6-30-2013 (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	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	2	1	0	0	0	0	0	0	3	303	101
	20,001-30,000	10	3	2	0	0	0	0	0	0	15	728	49
	30,001-40,000	12	5	5	2	0	0	0	0	0	24	1,838	77
	40,001-50,000	6	1	3	0	1	0	0	0	0	11	872	79
	50,001+	1	2	0	1	0	0	0	0	0	4	348	87
	Subtotal	29	13	11	3	1	0	0	0	0	57	4,090	72
35-39	0-20,000	23	2	0	1	0	0	0	0	0	26	967	37
	20,001-30,000	91	33	24	11	0	0	0	0	0	159	10,592	67
	30,001-40,000	142	61	31	20	3	1	0	0	0	258	17,578	68
	40,001-50,000	216	81	58	32	6	1	1	0	0	395	28,814	73
	50,001+	121	71	52	42	18	1	0	0	0	305	30,926	101
	Subtotal	593	248	165	106	27	3	1	0	0	1,143	88,877	78
40-44	0-20,000	60	7	0	0	0	0	0	0	0	67	3,034	45
	20,001-30,000	211	62	37	22	8	2	0	0	0	342	21,705	63
	30,001-40,000	295	121	98	77	19	9	1	0	0	620	55,056	89
	40,001-50,000	465	201	128	61	26	8	0	0	0	889	68,909	78
	50,001+	366	207	181	143	92	58	11	0	0	1,058	129,950	123
	Subtotal	1,397	598	444	303	145	77	12	0	0	2,976	278,653	94
45-49	0-20,000	73	48	6	0	1	0	0	0	0	128	7,930	62
	20,001-30,000	296	122	77	34	18	9	0	0	0	556	42,019	76
	30,001-40,000	359	163	124	81	50	11	6	0	0	794	75,972	96
	40,001-50,000	320	179	116	80	34	18	7	2	1	757	74,887	99
	50,001+	492	304	262	209	125	68	33	7	0	1,500	190,017	127
	Subtotal	1,540	816	585	404	228	106	46	9	1	3,735	390,825	105

APPENDIX C
Public Employee Leave Analysis
Sick Leave and Demographic Information as of 6-30-2013 (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	18	108	1	2	2	0	0	0	0	131	10,561	81
	20,001-30,000	390	167	119	60	23	8	1	0	0	768	60,853	79
	30,001-40,000	426	179	145	124	56	22	5	2	1	960	96,559	101
	40,001-50,000	226	131	111	67	48	18	10	2	0	613	69,627	114
	50,001+	385	207	185	164	104	50	12	6	0	1,113	136,682	123
	Subtotal		1,445	792	561	417	233	98	28	10	1	3,585	374,283
55-59	0-20,000	24	148	9	1	1	0	0	0	0	183	17,332	95
	20,001-30,000	443	212	155	86	30	7	3	0	0	936	78,636	84
	30,001-40,000	396	201	156	147	81	27	6	1	1	1,016	113,554	112
	40,001-50,000	228	115	120	78	37	23	8	0	0	609	68,618	113
	50,001+	417	197	209	177	115	64	24	1	2	1,206	154,650	128
	Subtotal		1,508	873	649	489	264	121	41	2	3	3,950	432,790
60-64	0-20,000	19	175	41	2	1	0	0	0	0	238	24,407	103
	20,001-30,000	297	161	134	65	32	7	2	0	0	698	64,527	92
	30,001-40,000	255	122	143	109	67	21	7	0	0	724	87,907	121
	40,001-50,000	131	78	71	58	41	25	7	0	0	411	54,300	132
	50,001+	316	131	154	139	94	48	21	4	2	909	119,513	131
	Subtotal		1,018	667	543	373	235	101	37	4	2	2,980	350,654
65-69	0-20,000	11	104	1	1	1	0	0	0	0	118	11,503	97
	20,001-30,000	65	40	49	30	13	4	1	0	0	202	23,617	117
	30,001-40,000	56	37	31	25	20	5	3	0	0	177	22,449	127
	40,001-50,000	41	17	15	18	13	7	2	0	1	114	15,241	134
	50,001+	108	39	44	35	35	14	10	1	3	289	38,424	133
	Subtotal		281	237	140	109	82	30	16	1	4	900	111,233
70+	0-20,000	10	19	15	1	1	0	0	0	1	47	5,417	115
	20,001-30,000	27	11	18	17	3	1	1	0	0	78	9,138	117
	30,001-40,000	13	4	7	11	5	5	2	0	0	47	7,832	167
	40,001-50,000	12	2	5	2	1	2	1	0	0	25	3,009	120
	50,001+	29	9	5	12	5	2	4	1	0	67	8,214	123
	Subtotal		91	45	50	43	15	10	8	1	1	264	33,609
All	0-20,000	238	613	74	8	7	0	0	0	1	941	81,453	87
	20,001-30,000	1,830	811	615	325	127	38	8	0	0	3,754	311,815	83
	30,001-40,000	1,954	893	740	596	301	101	30	3	2	4,620	478,746	104
	40,001-50,000	1,645	805	627	396	207	102	36	4	2	3,824	384,276	100
	50,001+	2,235	1,167	1,092	922	588	305	115	20	7	6,451	808,724	125
	Total		7,902	4,289	3,148	2,247	1,230	546	189	27	12	19,590	2,065,014

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	0	0	0	0	0	0	0
30-34	10	4	43	1	0	0	0	58
35-39	292	142	539	170	0	0	0	1,143
40-44	741	388	681	961	229	3	1	3,004
45-49	905	586	617	798	1,005	343	12	4,266
50-54	909	590	803	938	994	1,443	812	6,489
55-59	858	820	658	913	1,158	1,164	2,513	8,084
60-64	592	660	481	597	884	860	1,933	6,007
65-69	189	172	144	192	249	235	519	1,700
70+	62	39	42	62	88	83	218	594
All	4,558	3,401	4,008	4,632	4,607	4,131	6,008	31,345

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	30	13	11	3	1	0	0	0	0	58
35-39	593	248	165	106	27	3	1	0	0	1,143
40-44	1,405	606	450	307	146	78	12	0	0	3,004
45-49	1,728	897	661	470	288	142	66	13	1	4,266
50-54	2,194	1,235	960	815	582	372	197	102	32	6,489
55-59	2,478	1,524	1,118	1,009	759	503	337	193	163	8,084
60-64	1,687	1,120	890	717	562	396	264	139	232	6,007
65-69	480	379	190	160	153	91	73	63	111	1,700
70+	184	90	78	60	34	32	36	22	58	594
All	10,779	6,112	4,523	3,647	2,552	1,617	986	532	597	31,345

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	3	15	25	11	3	1	58
35-39	26	159	258	395	186	119	1,143
40-44	69	344	628	895	657	411	3,004
45-49	133	581	906	891	1,069	686	4,266
50-54	172	915	1,484	1,107	1,594	1,217	6,489
55-59	400	1,123	1,724	1,155	1,772	1,910	8,084
60-64	527	835	1,181	749	1,107	1,608	6,007
65-69	221	233	313	213	267	453	1,700
70+	93	96	106	69	73	157	594
All	1,644	4,301	6,625	5,485	6,728	6,562	31,345

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	1	0	0	0	0	0	0	1
35-39	0	0	0	0	0	0	0	0
40-44	5	4	0	12	5	1	1	28
45-49	25	37	57	17	81	302	12	531
50-54	70	76	222	249	147	1,354	786	2,904
55-59	69	79	107	191	205	1,026	2,457	4,134
60-64	109	52	64	72	121	743	1,866	3,027
65-69	53	10	6	10	32	192	497	800
70+	31	2	1	3	11	68	214	330
All	363	260	457	554	602	3,686	5,833	11,755

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	1	0	0	0	0	0	0	0	0	1
35-39	0	0	0	0	0	0	0	0	0	0
40-44	8	8	6	4	1	1	0	0	0	28
45-49	188	81	76	66	60	36	20	4	0	531
50-54	749	443	399	398	349	274	169	92	31	2,904
55-59	970	651	469	520	495	382	296	191	160	4,134
60-64	669	453	347	344	327	295	227	135	230	3,027
65-69	199	142	50	51	71	61	57	62	107	800
70+	93	45	28	17	19	22	28	21	57	330
All	2,877	1,823	1,375	1,400	1,322	1,071	797	505	585	11,755

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	1	0	0	0	1
35-39	0	0	0	0	0	0	0
40-44	2	2	8	6	3	7	28
45-49	5	25	112	134	165	90	531
50-54	41	147	524	494	977	721	2,904
55-59	217	187	708	546	1,116	1,360	4,134
60-64	289	137	457	338	616	1,190	3,027
65-69	103	31	136	99	129	302	800
70+	46	18	59	44	45	118	330
All	703	547	2,005	1,661	3,051	3,788	11,755

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	0	0	0	0	0	0	0
30-34	9	4	43	1	0	0	0	57
35-39	292	142	539	170	0	0	0	1,143
40-44	736	384	681	949	224	2	0	2,976
45-49	880	549	560	781	924	41	0	3,735
50-54	839	514	581	689	847	89	26	3,585
55-59	789	741	551	722	953	138	56	3,950
60-64	483	608	417	525	763	117	67	2,980
65-69	136	162	138	182	217	43	22	900
70+	31	37	41	59	77	15	4	264
All	4,195	3,141	3,551	4,078	4,005	445	175	19,590

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	29	13	11	3	1	0	0	0	0	57
35-39	593	248	165	106	27	3	1	0	0	1,143
40-44	1,397	598	444	303	145	77	12	0	0	2,976
45-49	1,540	816	585	404	228	106	46	9	1	3,735
50-54	1,445	792	561	417	233	98	28	10	1	3,585
55-59	1,508	873	649	489	264	121	41	2	3	3,950
60-64	1,018	667	543	373	235	101	37	4	2	2,980
65-69	281	237	140	109	82	30	16	1	4	900
70+	91	45	50	43	15	10	8	1	1	264
All	7,902	4,289	3,148	2,247	1,230	546	189	27	12	19,590

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	3	15	24	11	3	1	57
35-39	26	159	258	395	186	119	1,143
40-44	67	342	620	889	654	404	2,976
45-49	128	556	794	757	904	596	3,735
50-54	131	768	960	613	617	496	3,585
55-59	183	936	1,016	609	656	550	3,950
60-64	238	698	724	411	491	418	2,980
65-69	118	202	177	114	138	151	900
70+	47	78	47	25	28	39	264
All	941	3,754	4,620	3,824	3,677	2,774	19,590

APPENDIX C

Public Employees 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	1	0	36	1	0	0	0	38
35-39	9	3	323	118	0	0	0	453
40-44	17	8	423	536	132	1	0	1,117
45-49	13	11	332	446	396	122	6	1,326
50-54	20	12	339	390	447	374	307	1,889
55-59	11	9	342	412	441	298	540	2,053
60-64	15	10	237	296	277	186	362	1,383
65-69	7	5	73	88	60	40	106	379
70+	2	0	19	33	21	25	49	149
All	95	58	2,124	2,320	1,774	1,046	1,370	8,787

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	20	8	8	2	0	0	0	0	0	38
35-39	209	103	85	48	7	1	0	0	0	453
40-44	480	217	181	148	64	25	2	0	0	1,117
45-49	522	242	190	173	115	55	24	5	0	1,326
50-54	636	281	275	233	186	124	82	60	12	1,889
55-59	630	303	303	239	211	134	105	58	70	2,053
60-64	431	187	184	170	135	88	66	38	84	1,383
65-69	118	40	45	51	41	16	17	14	37	379
70+	43	12	20	17	9	8	15	9	16	149
All	3,089	1,393	1,291	1,081	768	451	311	184	219	8,787

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	2	11	21	3	1	0	38
35-39	5	107	184	89	31	37	453
40-44	9	211	450	213	115	119	1,117
45-49	8	268	532	263	128	127	1,326
50-54	6	356	778	406	179	164	1,889
55-59	13	389	845	380	219	207	2,053
60-64	6	293	499	245	166	174	1,383
65-69	1	77	116	65	53	67	379
70+	3	42	42	16	28	18	149
All	53	1,754	3,467	1,680	920	913	8,787

APPENDIX C

Public Employees Retirement System
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	8	2	1	0	11
45-49	1	2	0	6	28	109	6	152
50-54	7	4	0	15	68	360	294	748
55-59	6	5	9	22	53	261	522	878
60-64	11	7	4	9	29	148	347	555
65-69	2	2	1	7	9	24	99	144
70+	0	0	0	1	2	18	48	69
All	27	20	14	68	191	921	1,316	2,557

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	2	1	3	3	1	1	0	0	0	11
45-49	60	15	15	16	24	12	8	2	0	152
50-54	188	83	95	81	92	75	68	54	12	748
55-59	203	80	108	81	101	92	87	58	68	878
60-64	114	47	52	56	64	51	50	38	83	555
65-69	38	7	13	7	11	7	11	14	36	144
70+	14	3	5	4	4	4	10	9	16	69
All	619	236	291	248	297	242	234	175	215	2,557

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	1	6	1	1	2	11
45-49	0	13	65	48	12	14	152
50-54	1	93	290	214	81	69	748
55-59	0	91	372	202	108	105	878
60-64	0	62	186	119	87	101	555
65-69	0	15	47	26	25	31	144
70+	1	10	23	8	15	12	69
All	2	285	989	618	329	334	2,557

APPENDIX C

**Public Employees 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	1	0	36	1	0	0	0	38
35-39	9	3	323	118	0	0	0	453
40-44	17	8	423	528	130	0	0	1,106
45-49	12	9	332	440	368	13	0	1,174
50-54	13	8	339	375	379	14	13	1,141
55-59	5	4	333	390	388	37	18	1,175
60-64	4	3	233	287	248	38	15	828
65-69	5	3	72	81	51	16	7	235
70+	2	0	19	32	19	7	1	80
All	68	38	2,110	2,252	1,583	125	54	6,230

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	20	8	8	2	0	0	0	0	0	38
35-39	209	103	85	48	7	1	0	0	0	453
40-44	478	216	178	145	63	24	2	0	0	1,106
45-49	462	227	175	157	91	43	16	3	0	1,174
50-54	448	198	180	152	94	49	14	6	0	1,141
55-59	427	223	195	158	110	42	18	0	2	1,175
60-64	317	140	132	114	71	37	16	0	1	828
65-69	80	33	32	44	30	9	6	0	1	235
70+	29	9	15	13	5	4	5	0	0	80
All	2,470	1,157	1,000	833	471	209	77	9	4	6,230

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	2	11	21	3	1	0	38
35-39	5	107	184	89	31	37	453
40-44	9	210	444	212	114	117	1,106
45-49	8	255	467	215	116	113	1,174
50-54	5	263	488	192	98	95	1,141
55-59	13	298	473	178	111	102	1,175
60-64	6	231	313	126	79	73	828
65-69	1	62	69	39	28	36	235
70+	2	32	19	8	13	6	80
All	51	1,469	2,478	1,062	591	579	6,230

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	0	0	0	0	0	0	0
30-34	8	3	4	0	0	0	0	15
35-39	268	129	90	21	0	0	0	508
40-44	686	359	98	194	29	0	0	1,366
45-49	828	558	126	164	396	149	2	2,223
50-54	795	558	325	363	352	920	414	3,727
55-59	744	768	170	310	446	663	1,606	4,707
60-64	443	606	122	147	329	454	1,173	3,274
65-69	102	134	27	34	98	119	244	758
70+	19	31	8	9	36	35	85	223
All	3,893	3,146	970	1,242	1,686	2,340	3,524	16,801

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	9	4	1	0	1	0	0	0	0	15
35-39	317	110	57	18	4	2	0	0	0	508
40-44	764	326	193	66	14	3	0	0	0	1,366
45-49	942	512	391	211	111	40	12	3	1	2,223
50-54	1,279	704	597	479	325	203	90	31	19	3,727
55-59	1,483	733	712	657	463	299	180	107	73	4,707
60-64	931	458	511	452	347	231	149	82	113	3,274
65-69	208	109	103	87	78	53	41	31	48	758
70+	64	27	26	29	16	17	14	8	22	223
All	5,997	2,983	2,591	1,999	1,359	848	486	262	276	16,801

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	1	4	4	4	1	1	15
35-39	3	47	45	260	96	57	508
40-44	7	118	127	572	377	165	1,366
45-49	15	285	276	496	783	368	2,223
50-54	24	523	563	533	1,278	806	3,727
55-59	23	675	693	575	1,414	1,327	4,707
60-64	23	479	533	359	832	1,048	3,274
65-69	16	124	154	102	164	198	758
70+	15	46	50	31	30	51	223
All	127	2,301	2,445	2,932	4,975	4,021	16,801

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	1	0	0	0	0	0	0	1
35-39	0	0	0	0	0	0	0	0
40-44	4	4	0	2	1	0	0	11
45-49	22	32	53	10	33	136	2	288
50-54	49	71	217	229	64	869	404	1,903
55-59	42	66	88	155	118	599	1,575	2,643
60-64	27	42	47	51	59	415	1,132	1,773
65-69	3	3	3	3	16	106	234	368
70+	0	2	0	0	5	31	82	120
All	148	220	408	450	296	2,156	3,429	7,107

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	1	0	0	0	0	0	0	0	0	1
35-39	0	0	0	0	0	0	0	0	0	0
40-44	4	6	1	0	0	0	0	0	0	11
45-49	97	50	50	39	29	16	6	1	0	288
50-54	509	289	277	288	230	176	87	29	18	1,903
55-59	648	314	324	405	354	251	170	105	72	2,643
60-64	403	161	200	254	230	196	139	78	112	1,773
65-69	82	26	26	35	45	43	35	31	45	368
70+	27	11	7	10	9	13	14	7	22	120
All	1,771	857	885	1,031	897	695	451	251	269	7,107

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	0	0	0	1
35-39	0	0	0	0	0	0	0
40-44	0	1	0	4	2	4	11
45-49	0	8	31	61	129	59	288
50-54	1	46	198	213	855	590	1,903
55-59	1	78	275	236	947	1,106	2,643
60-64	2	58	210	160	474	869	1,773
65-69	1	8	73	55	76	155	368
70+	2	7	32	25	19	35	120
All	7	206	820	754	2,502	2,818	7,107

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	0	0	0	0	0
40-44	1	5	0	0	8	0	0	14
45-49	156	143	15	2	257	7	0	580
50-54	88	95	16	6	198	12	3	418
55-59	85	113	16	6	257	32	10	519
60-64	53	96	8	9	221	23	15	425
65-69	8	15	2	1	65	10	5	106
70+	1	2	1	1	20	1	0	26
All	392	469	58	25	1,026	85	33	2,088

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	7	0	2	2	2	1	0	0	0	14
45-49	213	112	108	74	50	15	6	1	1	580
50-54	133	83	80	58	47	14	2	1	0	418
55-59	169	84	88	81	60	27	8	1	1	519
60-64	119	57	74	68	71	24	9	2	1	425
65-69	30	18	12	13	20	6	4	0	3	106
70+	6	4	3	5	5	2	0	1	0	26
All	677	358	367	301	255	89	29	6	6	2,088

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	1	5	6	2	0	14
45-49	2	25	40	91	278	144	580
50-54	3	42	63	54	169	87	418
55-59	1	76	114	70	170	88	519
60-64	1	66	92	49	137	80	425
65-69	0	21	25	10	33	17	106
70+	1	7	7	2	4	5	26
All	8	238	346	282	793	421	2,088

APPENDIX C

Teachers 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	7	3	4	0	0	0	0	14
35-39	268	129	90	21	0	0	0	508
40-44	681	350	98	192	20	0	0	1,341
45-49	650	383	58	152	106	6	0	1,355
50-54	658	392	92	128	90	39	7	1,406
55-59	617	589	66	149	71	32	21	1,545
60-64	363	468	67	87	49	16	26	1,076
65-69	91	116	22	30	17	3	5	284
70+	18	27	7	8	11	3	3	77
All	3,353	2,457	504	767	364	99	62	7,606

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	8	4	1	0	1	0	0	0	0	14
35-39	317	110	57	18	4	2	0	0	0	508
40-44	753	320	190	64	12	2	0	0	0	1,341
45-49	632	350	233	98	32	9	0	1	0	1,355
50-54	637	332	240	133	48	13	1	1	1	1,406
55-59	666	335	300	171	49	21	2	1	0	1,545
60-64	409	240	237	130	46	11	1	2	0	1,076
65-69	96	65	65	39	13	4	2	0	0	284
70+	31	12	16	14	2	2	0	0	0	77
All	3,549	1,768	1,339	667	207	64	6	5	1	7,606

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	1	4	3	4	1	1	14
35-39	3	47	45	260	96	57	508
40-44	7	116	122	562	373	161	1,341
45-49	13	252	205	344	376	165	1,355
50-54	20	435	302	266	254	129	1,406
55-59	21	521	304	269	297	133	1,545
60-64	20	355	231	150	221	99	1,076
65-69	15	95	56	37	55	26	284
70+	12	32	11	4	7	11	77
All	112	1,857	1,279	1,896	1,680	782	7,606

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	0	0	0	0	0	0	0
35-39	10	2	0	0	0	0	0	12
40-44	5	14	0	0	0	0	0	19
45-49	12	4	1	1	0	1	0	19
50-54	8	5	3	1	1	0	0	18
55-59	6	13	4	2	1	1	0	27
60-64	3	6	1	4	3	0	0	17
65-69	1	3	0	0	0	0	0	4
70+	1	0	0	0	0	0	0	1
All	46	47	9	8	5	2	0	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	9	3	0	0	0	0	0	0	0	12
40-44	5	6	5	2	0	1	0	0	0	19
45-49	8	7	0	3	1	0	0	0	0	19
50-54	6	7	3	1	0	1	0	0	0	18
55-59	4	10	4	5	1	3	0	0	0	27
60-64	3	2	3	4	2	3	0	0	0	17
65-69	0	2	1	0	0	0	0	1	0	4
70+	0	0	0	0	1	0	0	0	0	1
All	35	37	16	15	5	8	0	1	0	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	0	0	1	2	3	6	12
40-44	0	0	5	1	2	11	19
45-49	0	1	3	0	5	10	19
50-54	0	0	5	2	3	8	18
55-59	0	0	6	2	3	16	27
60-64	0	0	1	1	1	14	17
65-69	0	0	1	0	0	3	4
70+	0	0	0	0	0	1	1
All	0	1	22	8	17	69	117

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	0	0	0	0
45-49	1	1	1	0	0	0	0	3
50-54	3	0	3	1	1	0	0	8
55-59	0	1	4	2	0	1	0	8
60-64	0	0	1	2	1	0	0	4
65-69	0	0	0	0	0	0	0	0
70+	0	0	0	0	0	0	0	0
All	4	2	9	5	2	1	0	23

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	1	1	0	1	0	0	0	0	0	3
50-54	2	3	2	0	0	1	0	0	0	8
55-59	1	1	0	3	0	3	0	0	0	8
60-64	0	0	0	1	1	2	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	4	5	2	5	1	6	0	0	0	23

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	1	2	3
50-54	0	0	0	2	1	5	8
55-59	0	0	0	1	0	7	8
60-64	0	0	0	0	0	4	4
65-69	0	0	0	0	0	0	0
70+	0	0	0	0	0	0	0
All	0	0	0	3	2	18	23

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	0	0	0	0	0
45-49	3	1	0	0	0	0	0	4
50-54	1	2	0	0	0	0	0	3
55-59	0	3	0	0	0	0	0	3
60-64	0	2	0	0	2	0	0	4
65-69	0	0	0	0	0	0	0	0
70+	0	0	0	0	0	0	0	0
All	4	8	0	0	2	0	0	14

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	1	1	0	1	1	0	0	0	0	4
50-54	1	1	1	0	0	0	0	0	0	3
55-59	1	2	0	0	0	0	0	0	0	3
60-64	2	0	0	1	1	0	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	5	4	1	2	2	0	0	0	0	14

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	1	0	0	3	4
50-54	0	0	1	0	0	2	3
55-59	0	0	1	0	0	2	3
60-64	0	0	1	0	0	3	4
65-69	0	0	0	0	0	0	0
70+	0	0	0	0	0	0	0
All	0	0	4	0	0	10	14

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	0	0	0	0	0	0	0
35-39	10	2	0	0	0	0	0	12
40-44	5	14	0	0	0	0	0	19
45-49	8	2	0	1	0	1	0	12
50-54	4	3	0	0	0	0	0	7
55-59	6	9	0	0	1	0	0	16
60-64	3	4	0	2	0	0	0	9
65-69	1	3	0	0	0	0	0	4
70+	1	0	0	0	0	0	0	1
All	38	37	0	3	1	1	0	80

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	9	3	0	0	0	0	0	0	0	12
40-44	5	6	5	2	0	1	0	0	0	19
45-49	6	5	0	1	0	0	0	0	0	12
50-54	3	3	0	1	0	0	0	0	0	7
55-59	2	7	4	2	1	0	0	0	0	16
60-64	1	2	3	2	0	1	0	0	0	9
65-69	0	2	1	0	0	0	0	1	0	4
70+	0	0	0	0	1	0	0	0	0	1
All	26	28	13	8	2	2	0	1	0	80

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	1	2	3	6	12
40-44	0	0	5	1	2	11	19
45-49	0	1	2	0	4	5	12
50-54	0	0	4	0	2	1	7
55-59	0	0	5	1	3	7	16
60-64	0	0	0	1	1	7	9
65-69	0	0	1	0	0	3	4
70+	0	0	0	0	0	1	1
All	0	1	18	5	15	41	80

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	0	0	0	0	0	0	0
30-34	0	0	1	0	0	0	0	1
35-39	3	2	70	18	0	0	0	93
40-44	25	3	86	135	49	2	0	300
45-49	34	5	96	129	150	66	3	483
50-54	68	8	110	138	170	128	75	697
55-59	81	14	119	156	196	164	203	933
60-64	113	8	78	111	182	137	210	839
65-69	68	4	29	53	65	51	93	363
70+	35	2	10	13	21	16	51	148
All	427	46	599	753	833	564	635	3,857

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	1	0	0	0	0	0	0	0	0	1
35-39	40	29	11	12	1	0	0	0	0	93
40-44	105	55	60	51	25	4	0	0	0	300
45-49	192	84	73	71	38	17	8	0	0	483
50-54	267	104	85	99	69	39	23	10	1	697
55-59	359	118	99	107	83	67	52	28	20	933
60-64	321	86	87	91	78	73	49	19	35	839
65-69	154	32	41	22	34	22	15	17	26	363
70+	76	5	7	14	8	7	7	5	19	148
All	1,515	513	463	467	336	229	154	79	101	3,857

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	1	0	0	1
35-39	1	5	28	21	20	18	93
40-44	2	15	46	86	58	93	300
45-49	2	26	92	122	83	158	483
50-54	4	35	135	166	122	235	697
55-59	6	58	179	198	132	360	933
60-64	6	63	148	144	107	371	839
65-69	8	32	42	46	50	185	363
70+	3	8	14	21	15	87	148
All	32	242	684	805	587	1,507	3,857

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	2	2	0	0	4
45-49	0	1	2	0	13	52	3	71
50-54	8	0	2	2	12	104	72	200
55-59	19	5	6	8	23	130	197	388
60-64	70	1	7	4	20	106	203	411
65-69	48	2	2	0	7	37	93	189
70+	31	0	1	2	2	12	51	99
All	176	9	20	18	79	441	619	1,362

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	2	1	0	0	0	0	0	4
45-49	24	11	10	10	7	6	3	0	0	71
50-54	45	28	25	29	27	22	14	9	1	200
55-59	117	40	37	31	40	36	39	28	20	388
60-64	152	28	28	33	32	46	38	19	35	411
65-69	79	10	11	9	15	11	11	17	26	189
70+	52	1	4	3	6	5	4	5	19	99
All	469	119	117	116	127	126	109	78	101	1,362

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	2	1	0	1	4
45-49	0	4	13	23	18	13	71
50-54	0	8	33	65	37	57	200
55-59	0	18	60	107	61	142	388
60-64	3	17	61	59	55	216	411
65-69	3	8	16	18	28	116	189
70+	1	1	4	11	11	71	99
All	7	56	189	284	210	616	1,362

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	0	0	0	0	0
40-44	0	0	0	0	7	2	0	9
45-49	0	2	1	6	64	13	0	86
50-54	14	1	0	5	75	15	0	110
55-59	17	1	1	4	83	25	2	133
60-64	19	1	0	4	64	23	2	113
65-69	10	0	0	0	25	8	0	43
70+	2	0	0	0	12	3	0	17
All	62	5	2	19	330	89	4	511

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	2	3	3	0	0	1	0	0	0	9
45-49	25	20	13	11	9	5	3	0	0	86
50-54	43	10	9	24	14	4	6	0	0	110
55-59	50	13	12	21	14	11	12	0	0	133
60-64	37	10	14	17	10	15	10	0	0	113
65-69	21	5	5	2	5	1	4	0	0	43
70+	10	1	0	2	1	1	2	0	0	17
All	188	62	56	77	53	38	37	0	0	511

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	2	4	2	1	9
45-49	0	4	14	22	16	30	86
50-54	1	4	17	29	24	35	110
55-59	1	4	35	20	17	56	133
60-64	2	4	20	21	14	52	113
65-69	2	2	5	11	5	18	43
70+	0	0	4	7	1	5	17
All	6	18	97	114	79	197	511

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							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	1	0	0	0	0	1
35-39	3	2	70	18	0	0	0	93
40-44	25	3	86	133	40	0	0	287
45-49	34	2	93	123	73	1	0	326
50-54	46	7	108	131	83	9	3	387
55-59	45	8	112	144	90	9	4	412
60-64	24	6	71	103	98	8	5	315
65-69	10	2	27	53	33	6	0	131
70+	2	2	9	11	7	1	0	32
All	189	32	577	716	424	34	12	1,984

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	1	0	0	0	0	0	0	0	0	1
35-39	40	29	11	12	1	0	0	0	0	93
40-44	103	51	55	50	25	3	0	0	0	287
45-49	143	53	50	50	22	6	2	0	0	326
50-54	179	66	51	46	28	13	3	1	0	387
55-59	192	65	50	55	29	20	1	0	0	412
60-64	132	48	45	41	36	12	1	0	0	315
65-69	54	17	25	11	14	10	0	0	0	131
70+	14	3	3	9	1	1	1	0	0	32
All	858	332	290	274	156	65	8	1	0	1,984

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	1	0	0	1
35-39	1	5	28	21	20	18	93
40-44	2	15	42	81	56	91	287
45-49	2	18	65	77	49	115	326
50-54	3	23	85	72	61	143	387
55-59	5	36	84	71	54	162	412
60-64	1	42	67	64	38	103	315
65-69	3	22	21	17	17	51	131
70+	2	7	6	3	3	11	32
All	19	168	398	407	298	694	1,984

APPENDIX C

Great West
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	0	0	0	0	0	0
40-44	0	0	0	0	0	0	0	0
45-49	0	0	1	0	0	0	0	1
50-54	0	0	0	0	0	0	0	0
55-59	1	0	1	0	0	0	0	2
60-64	1	0	0	0	0	0	0	1
65-69	0	0	0	0	0	0	0	0
70+	1	0	0	0	0	0	0	1
All	3	0	2	0	0	0	0	5

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	1	0	0	0	0	0	0	0	1
50-54	0	0	0	0	0	0	0	0	0	0
55-59	1	1	0	0	0	0	0	0	0	2
60-64	1	0	0	0	0	0	0	0	0	1
65-69	0	0	0	0	0	0	0	0	0	0
70+	1	0	0	0	0	0	0	0	0	1
All	3	2	0	0	0	0	0	0	0	5

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	1	0	1
50-54	0	0	0	0	0	0	0
55-59	0	1	0	0	1	0	2
60-64	0	0	0	0	0	1	1
65-69	0	0	0	0	0	0	0
70+	0	0	0	1	0	0	1
All	0	1	0	1	2	1	5

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	0	0	0	0	0	0	0
45-49	0	0	1	0	0	0	0	1
50-54	0	0	0	0	0	0	0	0
55-59	1	0	1	0	0	0	0	2
60-64	1	0	0	0	0	0	0	1
65-69	0	0	0	0	0	0	0	0
70+	1	0	0	0	0	0	0	1
All	3	0	2	0	0	0	0	5

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	1	0	0	0	0	0	0	0	1
50-54	0	0	0	0	0	0	0	0	0	0
55-59	1	1	0	0	0	0	0	0	0	2
60-64	1	0	0	0	0	0	0	0	0	1
65-69	0	0	0	0	0	0	0	0	0	0
70+	1	0	0	0	0	0	0	0	0	1
All	3	2	0	0	0	0	0	0	0	5

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	1	0	1
50-54	0	0	0	0	0	0	0
55-59	0	1	0	0	1	0	2
60-64	0	0	0	0	0	1	1
65-69	0	0	0	0	0	0	0
70+	0	0	0	1	0	0	1
All	0	1	0	1	2	1	5

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	1	1	2	0	0	0	0	4
35-39	0	4	46	10	0	0	0	60
40-44	0	3	48	84	16	0	0	151
45-49	0	2	13	40	47	4	0	106
50-54	0	0	1	8	6	5	0	20
55-59	0	1	0	2	0	1	0	4
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	1	11	110	145	69	10	0	346

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	1	2	1	0	0	0	0	0	4
35-39	1	3	12	28	15	0	1	0	0	60
40-44	0	2	11	40	43	45	10	0	0	151
45-49	5	2	7	12	23	30	22	5	0	106
50-54	6	1	0	3	2	5	2	1	0	20
55-59	1	1	0	1	1	0	0	0	0	4
60-64	0	0	0	0	0	1	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	13	10	32	85	84	81	35	6	0	346

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	3	1	0	4
35-39	0	0	0	23	36	1	60
40-44	0	0	0	23	105	23	151
45-49	0	1	3	10	69	23	106
50-54	0	1	3	0	12	4	20
55-59	0	0	1	0	3	0	4
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	2	7	59	227	51	346

APPENDIX C

Public Safety "A" 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	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0	0
40-44	0	0	0	17	16	0	0	33
45-49	0	0	0	9	47	4	0	60
50-54	0	0	0	1	6	5	0	12
55-59	0	0	0	0	0	1	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	27	69	10	0	106

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	1	0	4	19	9	0	0	33
45-49	5	1	0	1	5	21	22	5	0	60
50-54	6	1	0	0	0	2	2	1	0	12
55-59	1	0	0	0	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	12	2	1	1	9	42	33	6	0	106

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	21	12	33
45-49	0	1	3	1	37	18	60
50-54	0	1	3	0	5	3	12
55-59	0	0	1	0	0	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	2	7	1	63	33	106

APPENDIX C

Public Safety "A" Retirement System
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	7	4	0	11
50-54	0	0	0	0	1	5	0	6
55-59	0	0	0	0	0	1	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	8	10	0	18

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	4	1	0	0	0	2	3	1	0	11
50-54	5	1	0	0	0	0	0	0	0	6
55-59	1	0	0	0	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	10	2	0	0	0	2	3	1	0	18

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	3	1	5	2	11
50-54	0	0	3	0	3	0	6
55-59	0	0	1	0	0	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	7	1	8	2	18

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							
	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	17	16	0	0	33
45-49	0	0	0	9	40	0	0	49
50-54	0	0	0	1	5	0	0	6
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	27	61	0	0	88

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	1	0	4	19	9	0	0	33
45-49	1	0	0	1	5	19	19	4	0	49
50-54	1	0	0	0	0	2	2	1	0	6
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	1	1	9	40	30	5	0	88

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	21	12	33
45-49	0	1	0	0	32	16	49
50-54	0	1	0	0	2	3	6
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	2	0	0	55	31	88

APPENDIX C

Public Safety "B" 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	1	1	2	0	0	0	0	4
35-39	0	4	46	10	0	0	0	60
40-44	0	3	48	67	0	0	0	118
45-49	0	2	13	31	0	0	0	46
50-54	0	0	1	7	0	0	0	8
55-59	0	1	0	2	0	0	0	3
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	1	11	110	118	0	0	0	240

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	1	2	1	0	0	0	0	0	4
35-39	1	3	12	28	15	0	1	0	0	60
40-44	0	2	10	40	39	26	1	0	0	118
45-49	0	1	7	11	18	9	0	0	0	46
50-54	0	0	0	3	2	3	0	0	0	8
55-59	0	1	0	1	1	0	0	0	0	3
60-64	0	0	0	0	0	1	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	1	8	31	84	75	39	2	0	0	240

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	3	1	0	4
35-39	0	0	0	23	36	1	60
40-44	0	0	0	23	84	11	118
45-49	0	0	0	9	32	5	46
50-54	0	0	0	0	7	1	8
55-59	0	0	0	0	3	0	3
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	58	164	18	240

APPENDIX C

Public Safety "B" Retirement System
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	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	1	0	0	0	0	0	1

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	1	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	0	0	1	0	0	0	0	0	0	1

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	1	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	0	1	0	0	1

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	1	1	2	0	0	0	0	4
35-39	0	4	46	10	0	0	0	60
40-44	0	3	48	67	0	0	0	118
45-49	0	1	13	31	0	0	0	45
50-54	0	0	1	7	0	0	0	8
55-59	0	1	0	2	0	0	0	3
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	1	10	110	118	0	0	0	239

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	1	2	1	0	0	0	0	0	4
35-39	1	3	12	28	15	0	1	0	0	60
40-44	0	2	10	40	39	26	1	0	0	118
45-49	0	1	6	11	18	9	0	0	0	45
50-54	0	0	0	3	2	3	0	0	0	8
55-59	0	1	0	1	1	0	0	0	0	3
60-64	0	0	0	0	0	1	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	1	8	30	84	75	39	2	0	0	239

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	3	1	0	4
35-39	0	0	0	23	36	1	60
40-44	0	0	0	23	84	11	118
45-49	0	0	0	8	32	5	45
50-54	0	0	0	0	7	1	8
55-59	0	0	0	0	3	0	3
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	57	164	18	239

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	2	2	10	3	0	0	0	17
40-44	8	1	26	12	3	0	1	51
45-49	18	6	48	18	16	1	1	108
50-54	18	7	25	38	18	16	16	138
55-59	15	15	22	31	74	37	164	358
60-64	17	30	43	38	93	83	188	492
65-69	11	26	15	17	26	25	76	196
70+	4	6	5	7	10	7	33	72
All	93	93	194	164	240	169	479	1,432

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	17	0	0	0	0	0	0	0	0	17
40-44	51	0	0	0	0	0	0	0	0	51
45-49	59	49	0	0	0	0	0	0	0	108
50-54	0	138	0	0	0	0	0	0	0	138
55-59	0	358	0	0	0	0	0	0	0	358
60-64	0	387	105	0	0	0	0	0	0	492
65-69	0	196	0	0	0	0	0	0	0	196
70+	0	46	25	0	0	0	0	0	1	72
All	127	1,174	130	0	0	0	0	0	1	1,432

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	17	0	0	0	0	0	17
40-44	51	0	0	0	0	0	51
45-49	108	0	0	0	0	0	108
50-54	138	0	0	0	0	0	138
55-59	358	0	0	0	0	0	358
60-64	492	0	0	0	0	0	492
65-69	196	0	0	0	0	0	196
70+	72	0	0	0	0	0	72
All	1,432	0	0	0	0	0	1,432

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	1	0	0	0	0	0	1	2
45-49	1	0	1	1	0	1	1	5
50-54	3	1	0	2	1	16	16	39
55-59	2	2	0	4	11	34	163	216
60-64	1	2	5	6	12	74	184	284
65-69	0	3	0	0	0	25	71	99
70+	0	0	0	0	2	7	33	42
All	8	8	6	13	26	157	469	687

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	2	0	0	0	0	0	0	0	0	2
45-49	2	3	0	0	0	0	0	0	0	5
50-54	0	39	0	0	0	0	0	0	0	39
55-59	0	216	0	0	0	0	0	0	0	216
60-64	0	217	67	0	0	0	0	0	0	284
65-69	0	99	0	0	0	0	0	0	0	99
70+	0	30	12	0	0	0	0	0	0	42
All	4	604	79	0	0	0	0	0	0	687

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	0	0	0	0	0	2
45-49	5	0	0	0	0	0	5
50-54	39	0	0	0	0	0	39
55-59	216	0	0	0	0	0	216
60-64	284	0	0	0	0	0	284
65-69	99	0	0	0	0	0	99
70+	42	0	0	0	0	0	42
All	687	0	0	0	0	0	687

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	1	0	0	1
45-49	0	2	0	0	9	0	0	11
50-54	1	0	0	0	9	0	0	10
55-59	4	3	3	1	48	1	1	61
60-64	3	3	2	2	74	7	4	95
65-69	3	5	0	0	19	0	2	29
70+	1	0	0	0	4	0	0	5
All	12	13	5	3	164	8	7	212

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	8	3	0	0	0	0	0	0	0	11
50-54	0	10	0	0	0	0	0	0	0	10
55-59	0	61	0	0	0	0	0	0	0	61
60-64	0	76	19	0	0	0	0	0	0	95
65-69	0	29	0	0	0	0	0	0	0	29
70+	0	2	3	0	0	0	0	0	0	5
All	9	181	22	0	0	0	0	0	0	212

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	1	0	0	0	0	0	1
45-49	11	0	0	0	0	0	11
50-54	10	0	0	0	0	0	10
55-59	61	0	0	0	0	0	61
60-64	95	0	0	0	0	0	95
65-69	29	0	0	0	0	0	29
70+	5	0	0	0	0	0	5
All	212	0	0	0	0	0	212

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	2	2	10	3	0	0	0	17
40-44	7	1	26	12	2	0	0	48
45-49	17	4	47	17	7	0	0	92
50-54	14	6	25	36	8	0	0	89
55-59	9	10	19	26	15	2	0	81
60-64	13	25	36	30	7	2	0	113
65-69	8	18	15	17	7	0	3	68
70+	3	6	5	7	4	0	0	25
All	73	72	183	148	50	4	3	533

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	17	0	0	0	0	0	0	0	0	17
40-44	48	0	0	0	0	0	0	0	0	48
45-49	49	43	0	0	0	0	0	0	0	92
50-54	0	89	0	0	0	0	0	0	0	89
55-59	0	81	0	0	0	0	0	0	0	81
60-64	0	94	19	0	0	0	0	0	0	113
65-69	0	68	0	0	0	0	0	0	0	68
70+	0	14	10	0	0	0	0	0	1	25
All	114	389	29	0	0	0	0	0	1	533

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	17	0	0	0	0	0	17
40-44	48	0	0	0	0	0	48
45-49	92	0	0	0	0	0	92
50-54	89	0	0	0	0	0	89
55-59	81	0	0	0	0	0	81
60-64	113	0	0	0	0	0	113
65-69	68	0	0	0	0	0	68
70+	25	0	0	0	0	0	25
All	533	0	0	0	0	0	533

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 2014 through 2039.

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, 2013, 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.

Public Employee Leave Analysis
Projected Sick Leave Days at Retirement by Plans and Years
As of June 30, 2013

All Employees
(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>
2014	11,511	2,101,837	183
2015	1,864	297,360	160
2016	1,756	291,944	166
2017	1,686	269,716	160
2018	1,799	253,872	141
2019	1,359	235,697	173
2020	1,312	228,658	174
2021	1,228	220,482	180
2022	1,129	201,588	179
2023	1,045	197,423	189
2024	1,002	201,104	201
2025	868	170,580	197
2026	832	173,152	208
2027	722	150,447	208
2028	612	135,169	221
2029	601	138,741	231
2030	473	101,748	215
2031	358	83,921	234
2032	304	74,508	245
2033	252	61,842	245
2034	195	52,880	271
2035	121	37,874	313
2036	136	38,172	281
2037	121	33,711	279
2038	45	11,393	253
2039	14	4,011	287
Total	31,345	5,767,831	184

Public Employee Leave Analysis
Projected Sick Leave Days at Retirement by Plans and Years
As of June 30, 2013

Public Employees 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>
2014	3,103	603,480	194
2015	639	110,520	173
2016	562	96,758	172
2017	535	87,582	164
2018	492	79,416	161
2019	409	64,116	157
2020	392	59,034	151
2021	350	58,024	166
2022	391	56,573	145
2023	355	56,897	160
2024	352	54,338	154
2025	296	47,214	160
2026	280	42,129	150
2027	236	35,736	151
2028	154	25,966	169
2029	114	23,776	209
2030	70	12,383	177
2031	30	6,908	230
2032	12	1,932	161
2033	8	3,186	398
2034	3	2,708	903
2035	4	6,274	1,569

Total	8,787	1,534,951	175
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Public Employee Leave Analysis
Projected Sick Leave Days at Retirement by Plans and Years
As of June 30, 2013

Teachers 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>
2014	6,036	1,112,418	184
2015	984	146,538	149
2016	936	147,564	158
2017	914	144,407	158
2018	799	131,186	164
2019	732	126,313	173
2020	701	126,480	180
2021	640	117,808	184
2022	529	107,354	203
2023	532	110,455	208
2024	466	107,097	230
2025	423	92,201	218
2026	407	91,844	226
2027	357	90,424	253
2028	348	86,455	248
2029	369	90,840	246
2030	318	73,312	231
2031	260	64,521	248
2032	250	64,016	256
2033	215	51,692	240
2034	173	44,952	260
2035	111	30,973	279
2036	131	35,858	274
2037	115	31,859	277
2038	41	10,536	257
2039	14	4,011	287
Total	16,801	3,241,114	193

Public Employee Leave Analysis
Projected Sick Leave Days at Retirement by Plans and Years
As of June 30, 2013

Troopers Plan A
(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>
2014	20	3,266	163
2015	17	6,648	391
2016	25	9,512	380
2017	4	1,111	278
2018	19	7,885	415
2019	5	1,786	357
2020	16	6,416	401
Total	106	36,623	346

Public Employee Leave Analysis
Projected Sick Leave Days at Retirement by Plans and Years
As of June 30, 2013

Troopers Plan B
(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>
2014	1	360	360
2015	2	579	289
2016	5	1,323	265
2017			
2018	5	1,727	345
2019	6	2,238	373
2020	24	8,000	333
2021	42	15,868	378
2022	18	6,374	354
2023	15	5,712	381
2024	43	17,081	397
2025	22	8,864	403
2026	22	9,172	417
2027	14	5,457	390
2028	14	5,229	374
2029	3	1,204	401
2030	1	433	433
2031			
2032	3	1,285	428
Total	240	90,907	379

Public Employee Leave Analysis
Projected Sick Leave Days at Retirement by Plans and Years
As of June 30, 2013

Plan X
(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>
2014	939	100,433	107
2015	47	5,070	108
2016	50	5,750	115
2017	46	5,464	119
2018	41	7,036	172
2019	32	11,309	353
2020	23	4,303	187
2021	25	3,208	128
2022	27	3,172	117
2023	26	4,623	178
2024	23	2,964	129
2025	23	3,890	169
2026	21	5,079	242
2027	20	3,367	168
2028	19	2,073	109
2029	23	3,027	132
2030	19	2,411	127
2031	13	2,210	170
2032	7	744	106
2033	4	290	72
2034			
2035	2	276	138
2036	1	830	830
2037	1	133	133
Total	1,432	177,660	124

Public Employee Leave Analysis
Projected Sick Leave Days at Retirement by Plans and Years
As of June 30, 2013

Plan D
(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>
2014	21	3,767	179
2015	2	329	164
2016	3	564	188
2017	6	1,095	183
2018	8	1,283	160
2019	9	2,601	289
2020	3	586	195
2021	3	112	37
2022	10	2,509	251
2023	1	6	6
2024	2	502	251
2025	3	764	255
2026	5	2,274	455
2027	6	1,151	192
2028	1	44	44
2029	3	752	251
2030	6	2,335	389
2031	2	756	378
2032	2	655	328
2033	4	1,225	306
2034	5	2,197	439
2035	1	4	4
2036	4	1,484	371
2037	4	1,508	377
2038	3	857	286
Total	117	29,362	251

Public Employee Leave Analysis
Projected Sick Leave Days at Retirement by Plans and Years
As of June 30, 2013

Plan F
(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>
2014	1,391	278,113	200
2015	172	27,606	160
2016	175	30,473	174
2017	181	30,057	166
2018	433	25,338	59
2019	166	27,334	165
2020	153	23,840	156
2021	168	25,462	152
2022	154	25,606	166
2023	116	19,730	170
2024	116	19,122	165
2025	100	17,477	175
2026	97	22,653	234
2027	89	14,313	161
2028	76	15,402	203
2029	89	19,143	215
2030	59	10,874	184
2031	53	9,525	180
2032	29	5,753	198
2033	21	5,449	259
2034	14	3,022	216
2035	3	347	116
2036			
2037	1	211	211
2038	1	-	-
Total	3,857	656,850	170

Public Employee Leave Analysis
Projected Sick Leave Days at Retirement by Plans and Years
As of June 30, 2013

Plan G			
(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>
2015	1	70	70
2018	2	-	-
2025	1	172	172
2032	1	123	123
Total	5	365	73

APPENDIX E
OPEB June 30, 2013

Retiree Premium Subsidy

<u>MEDICAL ONLY</u>	Count	AAL	NPV	Cashflow				
				2014	2015	2016	2017	2018
PERS	19,099	\$308,786,083	\$406,229,926	\$2,802,103	\$4,943,293	\$7,815,613	\$10,871,323	\$14,604,020
Troopers A	107	9,538,010	9,939,497	86,832	252,394	437,725	500,018	726,088
Troopers B	484	9,015,401	14,561,341	1,699	3,300	7,836	18,062	35,818
TRS Pre 6/30/1991	11,105	393,304,358	447,499,104	5,079,248	8,726,824	13,191,347	17,710,367	23,325,717
TRS-Post 7/1/1991	30,987	389,956,795	737,913,496	1,712,242	2,997,857	4,684,636	6,546,827	9,574,602
Undefined Group Pre 6/30/1991	899	33,269,737	35,725,285	720,448	1,126,052	1,597,814	2,006,765	2,488,072
Undefined Group Post 7/1/1991	2,249	31,367,235	47,446,174	327,852	531,663	778,624	1,036,004	1,378,665
Local Agencies	8,488	151,272,423	221,039,031	1,297,358	2,148,581	3,270,167	4,492,476	6,089,956
Retiree	38,692	1,543,803,206	1,543,803,206	151,501,111	138,639,722	144,951,260	149,755,888	157,890,232
<u>Retiree - Non Par</u>	<u>5</u>	<u>119,578</u>	<u>119,578</u>	<u>12,924</u>	<u>11,619</u>	<u>11,927</u>	<u>12,089</u>	<u>12,507</u>
Total	112,115	\$2,870,432,825	\$3,464,276,637	\$163,541,819	\$159,381,305	\$176,746,949	\$192,949,818	\$216,125,678

LIFE ONLY

PERS	2,909	\$4,469,388	\$7,369,999	\$33,928	\$63,434	\$102,843	\$151,012	\$213,007
Troopers A	8	72,578	75,265	437	828	3,585	3,858	6,349
Troopers B	65	123,231	220,419	-	-	451	483	530
TRS Pre 6/30/1991	1,023	4,470,623	5,214,557	41,209	75,797	119,751	166,674	226,778
TRS-Post 7/1/1991	6,886	10,560,203	23,480,065	33,793	60,890	93,642	132,596	191,039
Undefined Group Pre 6/30/1991	118	564,296	625,625	10,250	16,980	24,284	31,416	40,197
Undefined Group Post 7/1/1991	644	1,505,363	2,312,537	19,310	28,700	40,731	54,105	71,843
<u>Local Agencies</u>	<u>1,589</u>	<u>2,862,527</u>	<u>5,305,975</u>	<u>19,970</u>	<u>32,691</u>	<u>52,016</u>	<u>74,636</u>	<u>104,050</u>
Total	13,242	\$24,628,208	\$44,604,442	\$158,898	\$279,320	\$437,302	\$614,780	\$853,793

Sick & Annual Leave (Medical)

PERS	Before 7/1/1988		\$35,901,000	\$589,965	\$1,102,016	\$1,594,803	\$2,032,346	\$2,432,157
	7/1/1988-6/30/2001	\$75,915,609	53,599,000	724,648	1,201,668	1,496,979	1,635,683	1,762,978
Troopers A	Before 7/1/1988	-	-	-	-	-	-	-
	7/1/1988-6/30/2001	-	-	-	-	-	-	-
Troopers B	Before 7/1/1988		84,000	-	-	-	-	-
	7/1/1988-6/30/2001	7,732,659	11,498,000	-	-	-	-	-
TRS Pre 6/30/1991	Before 7/1/1988		86,051,000	937,229	1,844,919	2,658,046	3,444,259	4,217,843
	7/1/1988-6/30/1991	156,670,230	27,694,000	205,563	349,329	455,406	545,639	632,881
TRS Post 7/1/1991	7/1/1991-6/30/2001		143,064,000	1,631,715	2,746,362	3,458,332	3,950,477	4,406,763
Plan D 6/30/1991	Before 7/1/1988		1,124,000	6,402	13,027	19,403	18,365	23,955
	7/1/1988-6/30/1991	1,762,756	310,000	4,469	3,157	3,547	3,342	4,259
Plan D 7/1/1991	7/1/1991-6/30/2001		1,974,000	21,349	35,021	31,389	37,208	48,075
Plan F 6/30/1991	Before 7/1/1988		22,903,000	654,460	1,117,191	1,432,415	1,677,705	2,593,810
	7/1/1988-6/30/1991	41,989,429	5,229,000	76,989	126,142	158,317	181,457	281,599
Plan F 7/1/1991	7/1/1991-6/30/2001		25,217,000	337,207	575,923	736,518	794,614	932,139
Plan X Pre 6/30/1991	Before 7/1/1988		6,124,000	542,414	893,004	1,076,728	965,451	792,959
	7/1/1988-6/30/1991	15,273,126	2,828,000	176,033	261,849	307,504	279,714	258,973
<u>Plan X Post 7/1/1991</u>	<u>7/1/1991-6/30/2001</u>		13,023,000	484,162	749,058	861,969	780,974	654,500
Plan G Pre 6/30/1991	Before 7/1/1988		-	-	-	-	-	-
	7/1/1988-6/30/1991	22,819	-	-	-	-	-	-
Plan G Post 7/1/1991	7/1/1991-6/30/2001		33,000	-	1,018	2,209	2,080	1,307
<u>Local</u>		<u>10,134,072</u>	<u>22,594,265</u>	<u>169,081</u>	<u>355,252</u>	<u>561,468</u>	<u>776,146</u>	<u>963,170</u>
Total		\$309,500,700	\$459,250,265	\$6,561,686	\$11,374,936	\$14,855,033	\$17,125,460	\$20,007,367
Current Retirees Medical Total		\$57,991,000	\$57,991,000	\$11,868,181	\$11,168,101	\$11,700,617	\$10,895,416	\$8,803,566
TOTAL MEDICAL		\$3,262,552,733	\$4,026,122,344	\$182,130,584	\$182,203,662	\$203,739,901	\$221,585,474	\$245,790,404

Sick & Annual Leave (Annuity)

PERS	Before 7/1/1988		\$20,253,000	\$461,708	\$795,809	\$1,081,697	\$1,315,341	\$1,530,449
	7/1/1988-6/30/2001	\$35,396,255	18,301,000	248,662	452,039	658,191	849,592	1,045,191
Troopers A	Before 7/1/1988		850,000	2,713	8,809	30,441	33,860	43,117
	7/1/1988-6/30/2001	9,667,296	10,165,000	10,066	121,234	222,544	270,031	394,491
Troopers B	Before 7/1/1988		-	-	-	-	-	-
	7/1/1988-6/30/2001	1,267,233	1,633,000	-	-	5,749	14,420	17,677
TRS Pre 6/30/1991	Before 7/1/1988		90,907,000	1,855,522	3,333,306	4,611,625	5,705,802	6,639,954
	7/1/1988-6/30/1991	98,119,758	13,011,000	145,085	277,672	401,185	520,484	641,225
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	-	-	-	-	-	-	-
<u>Plan G Post 7/1/1991</u>	<u>7/1/1991-6/30/2001</u>		-	-	-	-	-	-
TOTAL ANNUITY		\$144,450,541	\$155,120,000	\$2,723,755	\$4,988,870	\$7,011,433	\$8,709,530	\$10,312,106

APPENDIX E
OPEB June 30, 2013

Retiree Premium Subsidy

<u>MEDICAL ONLY</u>	Count	AAL	NPV	Cashflow				
				2019	2020	2021	2022	2023
PERS	19,099	\$308,786,083	\$406,229,926	\$16,315,166	\$18,901,951	\$21,450,457	\$23,915,853	\$26,314,455
Troopers A	107	9,538,010	9,939,497	726,132	887,187	866,557	870,183	831,463
Troopers B	484	9,015,401	14,561,341	60,304	79,799	100,610	154,461	216,065
TRS Pre 6/30/1991	11,105	393,304,358	447,499,104	25,432,976	28,668,882	31,737,204	34,452,146	36,962,020
TRS-Post 7/1/1991	30,987	389,956,795	737,913,496	12,582,920	17,038,363	24,948,748	31,982,096	38,361,254
Undefined Group Pre 6/30/1991	899	33,269,737	35,725,285	2,583,630	2,775,181	2,928,085	3,062,926	3,168,752
Undefined Group Post 7/1/1991	2,249	31,367,235	47,446,174	1,560,385	1,865,772	2,226,768	2,490,692	2,726,278
Local Agencies	8,488	151,272,423	221,039,031	6,984,411	8,362,476	9,852,790	11,415,808	13,071,136
Retiree	38,692	1,543,803,206	1,543,803,206	145,074,556	141,581,051	138,031,031	134,275,805	130,263,779
<u>Retiree - Non Par</u>	<u>5</u>	<u>119,578</u>	<u>119,578</u>	<u>11,274</u>	<u>10,797</u>	<u>10,331</u>	<u>9,875</u>	<u>9,432</u>
Total	112,115	\$2,870,432,825	\$3,464,276,637	\$211,331,753	\$220,171,460	\$232,152,581	\$242,629,847	\$251,924,633

LIFE ONLY

PERS	2,909	\$4,469,388	\$7,369,999	\$250,888	\$301,199	\$348,658	\$395,448	\$441,638
Troopers A	8	72,578	75,265	6,105	7,274	7,453	7,637	6,705
Troopers B	65	123,231	220,419	508	517	2,131	2,177	1,656
TRS Pre 6/30/1991	1,023	4,470,623	5,214,557	256,881	297,352	335,938	374,183	408,616
TRS-Post 7/1/1991	6,886	10,560,203	23,480,065	263,107	376,750	572,335	768,558	965,450
Undefined Group Pre 6/30/1991	118	564,296	625,625	43,129	47,577	51,035	54,257	56,700
Undefined Group Post 7/1/1991	644	1,505,363	2,312,537	78,577	90,839	104,026	116,195	128,032
<u>Local Agencies</u>	<u>1,589</u>	<u>2,862,527</u>	<u>5,305,975</u>	<u>122,684</u>	<u>150,336</u>	<u>178,478</u>	<u>212,316</u>	<u>247,224</u>
Total	13,242	\$24,628,208	\$44,604,442	\$1,021,879	\$1,271,845	\$1,600,076	\$1,930,769	\$2,256,022

Sick & Annual Leave (Medical)

PERS	Before 7/1/1988		\$35,901,000	\$2,746,985	\$3,197,153	\$3,561,584	\$3,910,798	\$4,237,166
	7/1/1988-6/30/2001	\$75,915,609	53,599,000	1,852,714	2,095,672	2,374,638	2,730,610	3,117,212
Troopers A	Before 7/1/1988	-	-	-	-	-	-	-
	7/1/1988-6/30/2001	-	-	-	-	-	-	-
Troopers B	Before 7/1/1988		84,000	-	-	-	-	-
	7/1/1988-6/30/2001	7,732,659	11,498,000	-	-	12,429	35,319	69,884
TRS Pre 6/30/1991	Before 7/1/1988		86,051,000	4,826,699	5,925,393	7,120,664	8,406,483	9,682,656
	7/1/1988-6/30/1991	156,670,230	27,694,000	698,581	844,213	1,054,157	1,293,599	1,618,926
TRS Post 7/1/1991	7/1/1991-6/30/2001		143,064,000	4,639,730	5,293,303	6,037,177	6,785,166	7,837,006
Plan D 6/30/1991	Before 7/1/1988		1,124,000	25,430	36,740	57,199	79,661	111,618
	7/1/1988-6/30/1991	1,762,756	310,000	5,073	7,593	8,996	13,135	16,220
Plan D 7/1/1991	7/1/1991-6/30/2001		1,974,000	57,706	77,299	96,780	106,537	107,969
Plan F 6/30/1991	Before 7/1/1988		22,903,000	2,345,185	2,556,391	2,694,445	2,717,992	2,673,918
	7/1/1988-6/30/1991	41,989,429	5,229,000	267,454	324,667	408,101	511,305	608,868
Plan F 7/1/1991	7/1/1991-6/30/2001		25,217,000	899,392	975,056	1,115,316	1,305,816	1,536,457
Plan X Pre 6/30/1991	Before 7/1/1988		6,124,000	629,617	558,615	494,592	436,118	371,752
	7/1/1988-6/30/1991	15,273,126	2,828,000	235,235	247,018	247,221	258,457	225,235
<u>Plan X Post 7/1/1991</u>	<u>7/1/1991-6/30/2001</u>		13,023,000	628,196	588,095	610,194	629,774	744,378
Plan G Pre 6/30/1991	Before 7/1/1988		-	-	-	-	-	-
	7/1/1988-6/30/1991	22,819	-	-	-	-	-	-
Plan G Post 7/1/1991	7/1/1991-6/30/2001		33,000	778	228	212	155	101
<u>Local</u>		<u>10,134,072</u>	<u>22,594,265</u>	<u>1,128,408</u>	<u>1,277,029</u>	<u>1,417,653</u>	<u>1,532,962</u>	<u>1,636,875</u>
Total		\$309,500,700	\$459,250,265	\$20,987,183	\$24,004,465	\$27,311,358	\$30,753,885	\$34,596,240
Current Retirees Medical Total		\$57,991,000	\$57,991,000	\$5,960,929	\$3,967,692	\$2,611,520	\$1,732,619	\$1,157,065
TOTAL MEDICAL		\$3,262,552,733	\$4,026,122,344	\$239,301,744	\$249,415,462	\$263,675,535	\$277,047,120	\$289,933,960

Sick & Annual Leave (Annuity)

PERS	Before 7/1/1988		\$20,253,000	\$1,710,606	\$1,861,613	\$1,974,465	\$2,051,601	\$2,105,247
	7/1/1988-6/30/2001	\$35,396,255	18,301,000	1,215,751	1,371,816	1,507,245	1,627,527	1,727,767
Troopers A	Before 7/1/1988		850,000	46,914	50,158	54,218	58,197	61,755
	7/1/1988-6/30/2001	9,667,296	10,165,000	450,329	590,506	637,348	682,833	726,801
Troopers B	Before 7/1/1988		-	-	-	-	-	-
	7/1/1988-6/30/2001	1,267,233	1,633,000	29,767	47,035	57,328	88,745	106,612
TRS Pre 6/30/1991	Before 7/1/1988		90,907,000	7,391,357	7,986,758	8,434,067	8,751,425	8,960,341
	7/1/1988-6/30/1991	98,119,758	13,011,000	755,651	872,288	992,639	1,106,575	1,196,713
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	-	-	-	-	-	-	-
<u>Plan G Post 7/1/1991</u>	<u>7/1/1991-6/30/2001</u>		-	-	-	-	-	-
TOTAL ANNUITY		\$144,450,541	\$155,120,000	\$11,600,374	\$12,780,175	\$13,657,310	\$14,366,903	\$14,885,236