# Vermont State Employees' Retirement System 

Actuarial Valuation Report as of June 30, 2015

October 2015


October 26, 2015

Board of Trustees
Vermont State Employees' Retirement System
Montpelier, Vermont 05609
Dear Board Members:
Section 471, subsection (k), of Title 3, Chapter 16, Vermont Statutes Annotated, relating to the Vermont State Employees' Retirement System, provides in part that the actuary shall make annual valuations of the system.

The actuarial valuation of the system, prepared as of June 30, 2015, has now been completed and the results are presented in this report, together with our recommendations in regard to contributions payable by the State. The Table of Contents, which immediately follows, outlines the material contained in this report.

The total recommended state contribution for the fiscal year beginning July 1, 2015, amounts to \$46,226,144. Schedule F contains the projected contributions for the following two years.

Future actuarial measurements may differ significantly from current measurements due to plan experience differing from that anticipated by the economic and demographic assumptions, increases or decreases expected as part of the natural operation of the methodology used for these measurements, and changes in plan provisions or applicable law. An analysis of the potential range of future results is beyond the scope of this valuation.

I am a Fellow of the Society of Actuaries and a Member of the American Academy of Actuaries. I meet the Qualification Standards of the Academy to render the actuarial opinions contained herein. This report has been prepared in accordance with all applicable Actuarial Standards of Practice, and I am available to answer questions concerning it.

Respectfully submitted,

## Wainl 1. Drinuce

David L. Driscoll, FSA, EA, MAAA
Principal and Consulting Actuary

## DLD/jac

VSERS 102715 DLD_ValRpt 2015

## Table of Contents

## Section

I Summary of Principal Results .....  1
II Member Data ..... 2
III Assets ..... 5
IV Comments on Valuation ..... 6
V Contributions Payable under the System ..... 8
VI Experience ..... 9
VII Accounting Information ..... 10
Schedule
A Valuation Balance Sheet ..... 11
B Outline of Actuarial Assumptions and Methods ..... 13
C Brief Summary of Principal Plan Provisions as Interpreted for Valuation Purposes ..... 20
D Summary Tables of Member Data as of June 30, 2015 ..... 23
E Amortization Schedule for the Unfunded Actuarial Accrued Liability ..... 39
F Projection of Contributions for Following Two Fiscal Years ..... 40

## Section I - Summary of Principal Results

For convenience of reference, the principal results of the valuation and a comparison with the preceding year's results are summarized below:

|  | June 30, 2015 |  | June 30, 2014 |  |
| :---: | :---: | :---: | :---: | :---: |
| Active members |  |  |  |  |
| Vested |  | 5,465 |  | 5,637 |
| Non-vested |  | 2,981 |  | 2,688 |
| Total |  | 8,446 |  | 8,325 |
| Compensation | \$ | 462,057,022 | \$ | 437,675,917 |
| Average age |  | 46.54 years |  | 45.21 years |
| Average service |  | 11.71 years |  | 11.77 years |
| Average compensation | \$ | 54,707 | \$ | 52,574 |
| Retired members and beneficiaries |  |  |  |  |
| Number |  | 6,204 |  | 5,980 |
| Annual retirement allowances | \$ | 111,516,073 | \$ | 104,452,793 |
| Inactive members |  | 891 |  | 867 |
| Terminated vested members |  | 735 |  | 732 |
| Adjusted assets for valuation |  | 1,636,267,663 |  | 1,566,075,540 |
| Unfunded actuarial accrued liability | \$ | 542,558,818 | \$ | 444,014,326 |
| Annual actuarial accrued liability contribution | \$ | 32,687,873 | \$ | 25,809,339 |
| Normal contribution rate |  | 2.93\% |  | 4.13\% |

Schedule B outlines the full set of actuarial assumptions and methods employed in the current valuation. There have been changes in the assumptions since last valuation. The assumptions now in use are based on the new experience study covering the period from July 1, 2010, through June 30, 2014. A summary of the changes to the assumptions is included in Schedule B.

Schedule C outlines the benefit provisions that were taken into account in the valuation.
Schedule F provides a projection of recommended State contributions for the next two fiscal years. Restrictions on the degree to which contributions made by the State may reflect additional amounts collected from members as a result of the increases in these rates (described below) are incorporated in Schedule F.

The normal cost to be paid by the State reflects the provisions of Act 63, Section 473 of the 2011 Legislative Session. From July 1, 2011 through June 30, 2016, should the annual value of the total increased member contributions of Group C, D, and F member contributions exceed $\$ 5,300,000$ on an aggregate basis, the amount in excess of $\$ 5,300,000$ shall not serve to reduce the State's contribution.

## Section II - Member Data

Member data were furnished in electronic format by the Retirement Division of the State Treasurer's Office. Buck did not audit this data but reviewed it for reasonableness and consistency with prior years' data. The accuracy of the results presented in this report is dependent on the accuracy of the data.

Twenty-nine members who terminated on June 30, 2015 and retired on July 1, 2015 were included with a valuation status as members receiving benefits.

Schedule D presents tables that summarize member data. Tables 1 through 5 summarize active member data by age and service. Tables 6 through 11 summarize service pensioners, disability pensioners and beneficiaries by age. Table 12 summarizes all pensioners by year of retirement.

The following tables show a summary of membership data:

| Group | Number | Annual Allowances |
| :---: | :---: | :---: |
| Service Retirements | 5,176 | \$ 98,958,750 |
| Disability Retirements | 378 | 5,049,993 |
| Beneficiaries of Deceased Members | 650 | 7,507,330 |
| Total | 6,204 | \$ 111,516,073 |

## Benefits Payable as of June 30, 2015 Tabulated by Type of Retirement and Option

| Group | Number | Annual Allowances |  |
| :---: | :---: | :---: | :---: |
| Service Retirements |  |  |  |
| Life Only | 1,643 | \$ | 22,825,206 |
| 50\% Joint and Survivor | 242 |  | 5,392,477 |
| 70\% Joint and Survivor | 68 |  | 3,375,985 |
| 100\% Joint and Survivor | 455 |  | 9,298,591 |
| 50\% Joint and Survivor, pop-up | 512 |  | 11,230,773 |
| 100\% Joint and Survivor, pop-up | 638 |  | 11,454,938 |
| Life and Return of Contributions | 1,618 |  | 35,380,780 |
| Total | 5,176 | \$ | 98,958,750 |
| Disability Retirements |  |  |  |
| Life Only | 179 | \$ | 1,994,783 |
| 50\% Joint and Survivor | 7 |  | 64,619 |
| 70\% Joint and Survivor | 14 |  | 507,115 |
| 100\% Joint and Survivor | 17 |  | 165,934 |
| 50\% Joint and Survivor, pop-up | 14 |  | 172,896 |
| 100\% Joint and Survivor, pop-up | 12 |  | 95,712 |
| Life and Return of Contributions | $\underline{135}$ |  | 2,048,934 |
| Total | 378 | \$ | 5,049,993 |
| Beneficiaries | 650 | \$ | 7,507,330 |
| Grand Total | 6,204 | \$ | 111,516,073 |

## Section II - Member Data (continued)




Number and Annual Compensation of Active Members as of June 30, 2015

| Group | Number |  | Annual mpensation |
| :---: | :---: | :---: | :---: |
| Group A |  |  |  |
| Men | 5 | \$ | 365,242 |
| Women | 1 |  | 67,171 |
| Total | 6 | \$ | 432,413 |
| Group C |  |  |  |
| Men | 396 | \$ | 30,745,885 |
| Women | 46 |  | 3,323,112 |
| Total | 442 | \$ | 34,068,997 |
| Group D |  |  |  |
| Men | 34 | \$ | 3,838,872 |
| Women | 14 |  | 1,589,291 |
| Total | 48 | \$ | 5,428,163 |
| Group F |  |  |  |
| Men | 3,664 | \$ | 202,276,138 |
| Women | 4,286 |  | 219,851,311 |
| Total | 7,950 | \$ | 422,102,449 |
| All Members |  |  |  |
| Men | 4,099 | \$ | 237,226,137 |
| Women | 4,347 |  | 224,830,885 |
| Total | 8,446 | \$ | 462,057,022 |

## Section III - Assets

The asset values and cash flow amounts shown below were taken from reports supplied by the Office of the State Treasurer. The information contained in the reports has not yet been audited but is believed to be sufficiently accurate for purposes of this valuation.

For actuarial purposes, the assets are valued using a method that reflects the market value of assets by gradual recognition of returns on assets that differ from the assumed rate of return, provided the adjusted asset value is within $20 \%$ of the market value. The following shows the development of the valuation assets:

Assets for valuation purposes, June 30, 2014
Cash flow during year (net of investment income)
Contributions paid
Benefit payouts
Expenses
Net
Expected investment income (6.25\%)
Preliminary asset value
Market value, June 30, 2015
1,624,861,239
Preliminary asset value
Unrecognized appreciation
Adjustment
Assets for valuation purposes, June 30, 2015
89,600,885
$(8,158,498)$ 1,639,119,269
$(14,258,030)$
X 20\%
\$ 1,566,075,540
$\$ \quad(2,851,606)$
\$ 1,636,267,663

The assets for valuation purposes are $100.7 \%$ of market value.
The investment rate of return for the year ending June 30,2015 is $6.46 \%$, based on the adjusted asset value.

## Section IV - Comments on Valuation

Schedule A of the report contains a valuation balance sheet that shows the present and prospective assets and liabilities of the system as of June 30, 2015.

The adjusted assets of the system are \$1,636,267,663.
The actuarial accrued liability for current retired members, terminated vested members and beneficiaries is $\$ 1,285,474,492$ and the actuarial accrued liability for current active and inactive member's amounts to $\$ 893,351,989$, for a total actuarial accrued liability of $\$ 2,178,826,481$. Therefore, after subtracting assets of $\$ 1,636,267,663$, the unfunded actuarial accrued liability is $\$ 542,558,818$.

The State's contributions consist of a normal contribution and an accrued liability contribution. The accrued liability contribution represents the amount necessary to amortize the unfunded accrued liability as of June 30, 2015, over a period ending on June 30, 2038. These amounts are to rise by 5\% per year over the term of the amortization period. Normal contributions represent the contributions needed to fund the benefits attributed by the funding method to service rendered in the coming year. Under the Entry Age Normal funding method, the normal contribution as of June 30,2015 , is $\$ 13,538,271$, or $2.93 \%$ of members' compensation.

The expected unfunded actuarial accrued liability as of June 30, 2015, may be compared to the actual actuarial accrued liability to determine the gain or loss during the year. The following table presents a summary of the approximate effects of major experience factors affecting the system's unfunded actuarial accrued liability since June 30, 2014:

1. Unfunded liability, June 30, 2014
2. Normal Cost
3. Contributions
4. Interest on 1, 2 and 3
5. Change in Actuarial Assumptions
6. Restart of select-and-ultimate interest structure
7. Expected Unfunded Liability, June 30, 2015
8. Accrued Liability, June 30, 2015
9. Actuarial Value of Assets, June 30, 2015
10. Actual Unfunded Liability, 8. - 9.
11. Total gain/(loss), 7. - 10.
\$ 444,014,328
44,725,724
$(89,600,885)$
27,788,660
47,333,194
37,273,643
511,534,664
2,178,826,481
1,636,267,663
542,558,818
$(31,024,154)$

Sources of Gain/(Loss)

| Investment experience | $3,188,069$ |
| :--- | ---: |
| Expenses (investments) | $(6,240,177)$ |
| Expenses (other than investments) | $(2,169,411)$ |
| Salary experience | $8,216,692$ |
| COLA experience | $11,711,910$ |
| New members and rehires | $(1,383,217)$ |
| Mortality among retirees, beneficiaries and terminated vested participants | $(4,539,085)$ |
| Mortality among active participants | 522,310 |
| Retirement experience | $(3,543,687)$ |
| Termination experience | $(5,138,472)$ |
| Disability experience | $(755,213)$ |
| Other (data corrections, purchased service, etc.) | $(30,893,873)$ |
| Total | $(31,024,154)$ |

## Section V - Contributions Payable under the System

Section 471, Subsection (k), of Title 3, Chapter 16, Vermont Statutes Annotated, relating to the Vermont State Employees' Retirement System, indicates that the actuary shall submit to the Board of Trustees his recommendation as to the contributions payable by the State based on annual valuations of the assets and liabilities of the system.

On the basis of the results of the current valuation, the actuary recommends that the Board of Trustees certify the following contributions for the fiscal year commencing July 1, 2015:

| Normal contribution | $\$$$13,538,271$ <br> Accrued liability contribution <br> Total | $32,687,873$ <br> $46,226,144$ |
| :--- | :---: | ---: |

Certain towns are participating in the system. Their contributions should be based on the following rates before administrative adjustments:

| Normal | $2.93 \%$ |
| :--- | ---: |
| Accrued liability | $\underline{7.07 \%}$ |
| $\quad$ Total | $10.00 \%$ |

## Section VI - Experience

Records are maintained whereby the actual experience of the system may be compared with the expected experience based on the tables adopted by the Board of Trustees. In accordance with Section 471, subsection (j), of Title 3, Chapter 16 of the Vermont Statutes Annotated, this experience is reviewed in regularly scheduled experience studies, and any changes in assumptions suggested by the cumulative experience of the system is brought to the Board's attention in reports prepared as part of such studies.

## Section VII - Accounting Information

The Governmental Accounting Standards Board (GASB) Statement No. 25 (GASB 25) is amended and replaced with the Governmental Accounting Standards Board (GASB) Statement No. 67 (GASB 67) effective for the fiscal year ending June 30, 2014 and a separate actuarial valuation report for the GASB 67 was prepared as of June 30, 2014.

## Schedule A: Balance Sheet Showing the Assets and Liabilities

## Assets

Adjusted assets of the system \$ 1,636,267,663

Present value of prospective contributions

| Members | 199,241,909 |
| :--- | ---: | ---: |
| State |  |
| $\quad$ Accrued liability contributions | $542,558,818$ |
| Normal contributions | $131,065,310$ |

Total prospective contributions
Total assets
\$ 1,636,267,663
\$ 872,866,037
\$ 2,509,133,700

## Liabilities

Actuarial present value of benefits payable on account of present retired members, terminated vested members and beneficiaries

Actuarial present value of benefits expected to become payable on account of active and inactive members

Total liabilities
\$ 1,223,659,208
\$ 2,509,133,700

## Schedule A: Balance Sheet Showing the Assets and Liabilities (continued)




## Schedule B: Outline of Actuarial Assumptions and Methods

Please note: The actuarial assumptions used in this valuation were reviewed and either affirmed for continued use or reset on the basis of an experience study covering the period from July 1, 2010 through June 30, 2014. The findings and recommendations of the experience study are summarized in a separate report.

Groups A, D and F

## Interest Rate

Current Year: 7.95\% flat rate
Prior Year: A select-and-ultimate interest rate set, specified below. The interest rate set is restarted every year.

| Year 1: | $6.25 \%$ | Year 10: | $8.50 \%$ |
| :--- | :--- | :--- | :--- |
| Year 2: | $6.75 \%$ | Year 11: | $8.50 \%$ |
| Year 3: | $7.00 \%$ | Year 12: | $8.50 \%$ |
| Year 4: | $7.50 \%$ | Year 13: | $8.50 \%$ |
| Year 5: | $7.75 \%$ | Year 14: | $8.50 \%$ |
| Year 6: | $8.25 \%$ | Year 15: | $8.50 \%$ |
| Year 7: | $8.25 \%$ | Year 16: | $8.75 \%$ |
| Year 8: | $8.25 \%$ | Year 17 and later: | $9.00 \%$ |
| Year 9: | $8.50 \%$ |  |  |

## Separations from Service

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

| $*$ <br> AgeWithdrawal and <br> Vested Retirement Current <br> Year | Prior <br> Year | Current <br> Year | Prior <br> Year |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $4.91 \%$ | $4.09 \%$ | $.02 \%$ | $.03 \%$ |
| 30 | 3.93 | 3.27 | .02 | .04 |
| 35 | 3.28 | 2.74 | .03 | .05 |
| 40 | 3.04 | 2.53 | .04 | .08 |
| 45 | 2.69 | 2.24 | .06 | .13 |
| 50 | 2.25 | 1.87 | .10 | .21 |
| 55 | 1.83 | N/A | .18 | .35 |
| 59 | 3.92 | N/A | .26 | .52 |
| 60 | 3.90 | N/A | .28 | .57 |
| 61 | 3.89 | N/A | .31 | .62 |

[^0]
## Schedule B: Actuarial Assumptions and Methods (continued)

Groups A, D and F (continued)
Active Service Mortality
Current Year:
RP-2000 Custom Table.
Prior Year:
RP-2000 Table for Employees using Scale AA to 2016.

## Active Service Retirement

| Retirement-Group $\mathrm{F}^{1}$ |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Male Employee |  |  | Female Employee |  |  |
| Age | Rate |  | Age | Rate |  |
|  | Current Year | Prior <br> Year |  | Current Year | Prior <br> Year |
| 50 | 16.0\% | 20.0\% | 50 | 6.0\% | 6.0\% |
| 51 | 16.0 | 20.0 | 51 | 8.0 | 8.0 |
| 52 | 8.0 | 10.0 | 52 | 9.0 | 9.0 |
| 53 | 8.0 | 10.0 | 53 | 9.0 | 9.0 |
| 54 | 8.0 | 10.0 | 54 | 10.0 | 10.0 |
| 55 | 4.0 | 5.0 | 55 | 5.0 | 5.0 |
| 56 | 3.4 | 4.2 | 56 | 4.2 | 4.2 |
| 57 | 4.5 | 5.6 | 57 | 5.6 | 5.6 |
| 58 | 5.0 | 6.3 | 58 | 6.3 | 6.3 |
| 59 | 5.6 | 7.0 | 59 | 5.6 | 7.0 |
| 60 | 5.6 | 7.0 | 60 | 5.6 | 7.0 |
| 61 | 11.2 | 14.0 | 61 | 11.2 | 14.0 |
| 62 | 22.4 | 28.0 | 62 | 22.4 | 28.0 |
| 63 | 17.5 | 17.5 | 63 | 14.0 | 17.5 |
| 64 | 17.5 | 17.5 | 64 | 14.0 | 17.5 |
| 65 | 25.0 | 25.0 | 65 | 20.0 | 25.0 |
| 66 | 15.0 | 15.0 | 66 | 15.0 | 15.0 |
| 67 | 17.5 | 17.5 | 67 | 17.5 | 17.5 |
| 68 | 17.5 | 17.5 | 68 | 17.5 | 17.5 |
| 69 | 20.0 | 20.0 | 69 | 20.0 | 20.0 |
| 70 | 100.0 | 100.0 | 70 | 100.0 | 100.0 |

[^1]
## Schedule B: Actuarial Assumptions and Methods (continued)

## Groups A, D and F (continued)

## Salary Increases

Representative values of the assumed annual rates of future salary increase are as follows:

| Age | Annual Rate of Salary Increase |  |
| :---: | :---: | :---: |
|  | Current Year | Prior Year |
| 25 | $6.21 \%$ | $7.79 \%$ |
| 30 | $5.66 \%$ | $7.33 \%$ |
| 35 | $5.26 \%$ | $7.00 \%$ |
| 40 | $4.92 \%$ | $6.75 \%$ |
| 45 | $4.36 \%$ | $6.27 \%$ |
| 50 | $3.70 \%$ | $5.70 \%$ |
| 55 | $3.50 \%$ | $5.20 \%$ |
| 60 | $3.50 \%$ | $4.67 \%$ |
| 64 | $3.50 \%$ | $4.50 \%$ |

## Deaths after Retirement

## Current Year:

For disabled retirees, the RP-2000 Combined Mortality Tables for Employees and Healthy Annuitants with a five-year set-forward.

Group A and F: For service retirees and beneficiaries, the RP-2000 Tables for Employees and Healthy Annuitants projected with Scale BB to 2025 with a 30\% Blue collar adjustment.

Group D: For service retirees and beneficiaries, the RP-2000 Tables for Employees and Healthy Annuitants projected with Scale BB to 2025.

The post-retirement mortality assumption was chosen to recognize improved longevity experienced as well as that expected prior to the next review of assumptions.

## Prior Year:

For service retirees and beneficiaries, the RP-2000 Mortality Tables for Employees and Healthy Annuitants projected with Scale AA to 2010.

For disabled retirees, the RP-2000 Combined Mortality Tables for Employees and Healthy Annuitants with a threeyear set-forward.

The post-retirement mortality assumption was chosen to recognize improved longevity experienced as well as that expected prior to the next review of assumptions.

## Schedule B: Actuarial Assumptions and Methods (continued)

## Groups A, D and F (continued)

## Inflation

The separately stated assumptions for investment return, salary increases and cost of living adjustments are consistent with an expected long term annual inflation rate of 3.00\% to 3.25\%.

## Future Expenses

No provision made; expenses of the system are paid by the State.

## Actuarial Cost Method

The costs of the Plan have been determined in accordance with the individual entry age normal actuarial cost method.

## Spouse's Age

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

## Percent Married

$75.4 \%$ ( $71.4 \%$ for Group F) of male members and $64.0 \%$ ( $63.1 \%$ for Group F) of female members are assumed to be married.

## Cost-of-Living Adjustments

Assumed to occur at the rate of $3 \%$ per annum for Groups $A$ and $D$ and $11 / 2 \%$ per annum for Group $F$ (beginning at age 62 for deferred retirements). For Group F employees retiring after July 1, 2009, cost-of-living-adjustments are assumed to increase from $1.5 \%$ to $3 \%$ per annum effective January 1, 2014.

## Inactive Members

Valuation liability equals $250 \%$ of accumulated contributions.

## Health and Medical Benefits for Retirees

Not included in this valuation.

## Asset Valuation Method

The amount of the assets for valuation purposes equals the preliminary asset value plus $20 \%$ of the difference between market and preliminary asset values. The preliminary asset value is equal to the previous year's asset value (for valuation purposes) adjusted for contributions less benefit payments and expenses plus expected investment income. If necessary, a further adjustment is made to ensure that the valuation assets are within $20 \%$ of the market value.

## Schedule B: Actuarial Assumptions and Methods (continued)

## GROUP C

## Interest Rate

Current Year: 7.95\% flat rate
Prior Year: A select-and-ultimate interest rate set, specified below. The interest rate set is restarted every year.

| Year 1: | $6.25 \%$ | Year 10: | $8.50 \%$ |
| :--- | :--- | :--- | :--- |
| Year 2: | $6.75 \%$ | Year 11: | $8.50 \%$ |
| Year 3: | $7.00 \%$ | Year 12: | $8.50 \%$ |
| Year 4: | $7.50 \%$ | Year 13: | $8.50 \%$ |
| Year 5: | $7.75 \%$ | Year 14: | $8.50 \%$ |
| Year 6: | $8.25 \%$ | Year 15: | $8.50 \%$ |
| Year 7: | $8.25 \%$ | Year 16: | $8.75 \%$ |
| Year 8: | $8.25 \%$ | Year 17 and later: | $9.00 \%$ |
| Year 9: | $8.50 \%$ |  |  |

## Separations before Retirement

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

| Age | Withdrawal and Vested Retirement $^{1}$ |  |  | Disability |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Current Year | Prior Year |  | Current <br> Year |  | Prior <br> Year |
|  | Male | Female | Male | Female |  |  |
| 25 | $4.32 \%$ | $8.64 \%$ | $3.60 \%$ | $7.20 \%$ | $.08 \%$ | $.15 \%$ |
| 30 | $4.32 \%$ | $8.64 \%$ | 3.60 | 7.20 | .10 | .20 |
| 35 | $4.32 \%$ | $8.64 \%$ | 3.60 | 7.20 | .13 | .27 |
| 40 | N/A | N/A | N/A | N/A | .20 | .40 |
| 45 | N/A | N/A | N/A | N/A | .32 | .65 |
| 50 | N/A | N/A | N/A | N/A | .55 | .11 |
| 55 | N/A | N/A | N/A | N/A | .91 | 1.82 |
| 60 | N/A | N/A | N/A | N/A | 1.46 | 2.93 |

Active Service Mortality ${ }^{2}$
Current Year: RP-2000 Table for Employees using Scale BB to 2025
Prior Year: RP-2000 Table for Employees using Scale AA to 2016

## Early and Normal Retirement Rates

All members are assumed to retire when first eligible to do so.

[^2]
## Schedule B: Actuarial Assumptions and Methods (continued)

## GROUP C (continued)

## Salary Increases

Representative values of the assumed annual rates of future salary increase are as follows:

| Age | Annual Rate of Salary Increase |  |
| :---: | :---: | :---: |
|  | Current Year | Prior Year |
| 25 | $6.21 \%$ | $7.79 \%$ |
| 30 | $5.66 \%$ | $7.33 \%$ |
| 35 | $5.26 \%$ | $7.00 \%$ |
| 40 | $4.92 \%$ | $6.75 \%$ |
| 45 | $4.36 \%$ | $6.27 \%$ |
| 50 | $3.70 \%$ | $5.70 \%$ |
| 55 | $3.50 \%$ | $5.20 \%$ |
| 60 | $3.50 \%$ | $4.67 \%$ |
| 64 | $3.50 \%$ | $4.50 \%$ |

## Deaths after Retirement

## Current Year:

For service retirees and beneficiaries, the RP-2000 Tables for Employees and Healthy Annuitants projected with Scale BB to 2025 with a Blue collar adjustment.

For disabled retirees, the RP-2000 Combined Mortality Tables for Employees and Healthy Annuitants with a fiveyear set-forward.

The post-retirement mortality assumption was chosen to recognize improved longevity experienced as well as that expected prior to the next review of assumptions.

## Prior Year:

For service retirees and beneficiaries, the RP-2000 Mortality Tables for Employees and Healthy Annuitants projected with Scale AA to 2010.

For disabled retirees, the RP-2000 Combined Mortality Tables for Employees and Healthy Annuitants with a three-year set-forward.

The post-retirement mortality assumption was chosen to recognize improved longevity experienced as well as that expected prior to the next review of assumptions.

## Inflation

The separately stated assumptions for investment return, salary increases and cost of living adjustments are consistent with an expected long term annual inflation rate of $3.00 \%$ to $3.25 \%$.

## Future Expenses

No provision made; expenses of the system are paid by the State.

## Schedule B: Actuarial Assumptions and Methods (continued)

## GROUP C (continued)

## Actuarial Cost Method

Individual entry age normal actuarial cost method. For actuarial valuations prior to June 30, 2006, the entry age normal cost method with frozen initial liability was used.

## Spouse's Age

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

## Percent Married

## $73.3 \%$ of male members and $61.0 \%$ of female members are assumed to be married.

## Cost-of-Living Adjustments

Assumed to occur at the rate of $3 \%$ per annum.

## Inactive Members

Liability equals $250 \%$ of accumulated contributions.
Health and Medical Benefits for Retirees
Not included in this valuation.

## Asset Valuation Method

The amount of the assets for valuation purposes equals the preliminary asset value plus $20 \%$ of the difference between market and preliminary asset values. The preliminary asset value is equal to the previous year's asset value (for valuation purposes) adjusted for contributions less benefit payments and expenses plus expected investment income. If necessary, a further adjustment is made to ensure that the valuation assets are within $20 \%$ of the market value.

## Schedule C: Summary of Principal Plan Provisions

## Effective Date

July 1, 1972 (for consolidated system).

## Creditable Service

Service as a member plus purchased service.

## Membership

Group A General employees who did not join noncontributory system on July 1, 1981.
Group C State police and motor vehicle inspectors.
Group D Judges.
Group F All other general employees.

## Average Final Compensation (AFC)

Groups A and F Average annual compensation during highest 3 consecutive years.
Group C Average annual compensation during highest 2 consecutive years.
Group D Annual compensation at retirement.

## Service Retirement Allowance

## Eligibility

Group A Earlier of age 65, with five years of service for members hired after July 1, 2004, and age 62 with 20 years of service.
Group C Age 55.
Group D Age 62 with 5 years of service.
Group F Age 62 or 30 years of service. For members hired after June 30, 2008, age 65 or a sum of age plus service greater than or equal to 87 .

Amount
Group A $\quad 1.67 \%$ of AFC times service.
Group C $\quad 2.5 \%$ of AFC times service up to 20 years.
Group D $3.33 \%$ of AFC times service up to 30 years.
Group F $\quad 1.25 \%$ of AFC times service prior to January 1, 1991, plus $1.67 \%$ of AFC times service after 1990, up to a maximum benefit of $50 \%$ of AFC. For members hired on or after July 1, 2008, the maximum benefit is $60 \%$ of AFC .
The above amounts include the portion of the allowance provided by member contributions.

## Early Retirement Allowance

## Eligibility

Groups A and D Age 55 with 5 years of service or 30 years of service.
Group C Age 50 with 20 years of service.
Group F Age 55 with 5 years of service.

## Schedule C: Summary of Principal Plan Provisions (continued)

## Amount

Group A
Actuarial equivalent of normal retirement allowance. For members with 30 years of service, there is no reduction.

Group C Same as normal retirement allowance.
Group D Normal allowance reduced by 3\% for each year commencement precedes age 62.
Group F For members hired prior to July 1, 2008, no reduction if 30 years of service; otherwise normal allowance reduced by $6 \%$ for each year commencement precedes age 62. For members hired on or after July 1, 2008, no reduction if combination of years and service equal to 87 ; otherwise reduced from age 65 based on the following table.

| Years of Service | Reduction in Benefit |
| :--- | :--- |
| 35 | One eighth of 1\% per year |
| 30 | One quarter of 1\% per year |
| 25 | One third of 1\% per year |
| 20 | Five twelfths of 1\% per year |
| Less than 20 | Five ninths of 1\% per year |

## Vested Retirement Allowance

## Eligibility

All Groups - 5 years of service.
Allowance beginning at normal retirement age based on AFC and service at termination.

## Ordinary Disability Retirement Allowance

## Eligibility

All Groups - 5 years of service and incapacitated, not work related, for performance of duty.

## Amount

Immediate allowance based on service to date of disability. Benefit is the greatest of $25 \%$ of AFC and unreduced accrued benefit as of date of disability.

## Accidental Disability Retirement Allowance

## Eligibility

All Groups incapacitated as a result of work related accident.

## Amount

Groups A, D and F immediate allowance based on service projected to normal retirement. Benefit is the greater of $25 \%$ of AFC and unreduced accrued benefit as of date of disability.

Group C Immediate allowance equal to 50\% of AFC with additional 10\% of AFC for each dependent child (up to 30\%).

## Ordinary Death Benefit

## Eligibility

Groups A and F Death after eligibility for early retirement or 10 years of service.
Group C Death after normal retirement age or 10 years of service.
Group D Death after normal retirement age or 10 years of service.

## Schedule C: Summary of Principal Plan Provisions (continued)

## Amount

Groups A, D and F maximum of reduced allowance under 100\% survivor option and disability allowance under $100 \%$ disability survivor option, commencing immediately.
Group C $\quad 70 \%$ of the allowance which would have been payable to the member plus additional allowance equal to $10 \%$ of AFC for each dependent child (up to 30\%).

## Accidental Death Benefit

Eligibility
All Groups Death as a result of work related accident.

## Amount

Groups A, D and F Allowance equal to $25 \%$ of AFC payable to spouse.
Group C Allowance equal to $35 \%$ of AFC payable to spouse plus $10 \%$ of AFC for each dependent child (up to $30 \%$ ).

## Optional Benefit and Death after Retirement

Lifetime allowance or actuarially equivalent allowance with survivor benefit as elected by member upon retirement. Upon death of a Group C member, an allowance equal to $70 \%$ of the member's allowance is continued to the surviving spouse.

## Refund of Contribution

Upon termination, if the member so elects or if no other benefit is payable, the member's accumulated contributions are refunded.

## Post-Retirement Adjustments

Groups A, C and D Allowances in payment for at least one year increased on each January 1 by the percentage increase in Consumer Price Index but not more than 5\%.

Group F Same, but increase is based on half of the Consumer Price Index increase. Increase is based on the full Consumer Price index Increase starting in 2014 for employees retiring after July 1, 2008.

## Member Contributions

| Groups A and D | 6.40\% (until June 30, 2016). |
| :--- | :--- |
| Group C | 8.28\% (until June 30, 2016). |
| Group F | 6.40\% through June 30, 2016 |
|  | 5.10\% from July 1, 2016 through June 30, 2019 <br>  <br>  4.85 thereafter |

## Schedule D: Summary Tables of Member Data

Table 1: Number and annual Compensation of Active Members Distributed by Age and Service

|  | 0-4 |  | 5-9 |  | 10-14 |  | 15-19 |  | 20-24 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age | No. | Salary | No. | Salary | No. | Salary | No. | Salary | No. | Salary |
| $\leq 20$ | 3 | 49,231 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 20-24 | 211 | 6,791,018 | 3 | 121,425 | 0 | 0 | 0 | 0 | 0 | 0 |
| 25-29 | 594 | 24,086,134 | 78 | 4,076,478 | 0 | 0 | 0 | 0 | 0 | 0 |
| 30-34 | 532 | 22,762,497 | 223 | 11,874,329 | 85 | 4,669,938 | 0 | 0 | 0 | 0 |
| 35-39 | 387 | 16,604,785 | 245 | 13,445,139 | 215 | 13,331,673 | 60 | 3,951,631 | 1 | 36,298 |
| 40-44 | 327 | 14,190,279 | 202 | 11,517,658 | 239 | 14,953,810 | 187 | 12,463,221 | 69 | 4,526,304 |
| 45-49 | 288 | 12,711,675 | 199 | 11,045,256 | 210 | 12,486,842 | 177 | 11,514,013 | 172 | 12,111,663 |
| 50-54 | 269 | 12,011,268 | 173 | 9,234,308 | 218 | 12,963,567 | 171 | 10,290,599 | 128 | 8,447,453 |
| 55-59 | 209 | 9,569,896 | 181 | 9,911,442 | 193 | 11,004,085 | 153 | 9,061,560 | 120 | 7,480,990 |
| 60-64 | 131 | 6,703,045 | 111 | 6,115,987 | 133 | 7,856,106 | 110 | 6,641,443 | 83 | 5,487,295 |
| 65-69 | 21 | 1,053,775 | 44 | 2,384,404 | 46 | 2,590,568 | 40 | 2,416,703 | 20 | 1,344,078 |
| $70 \geq$ | 9 | 363,828 | 5 | 220,188 | 11 | 564,561 | 7 | 401,675 | 5 | 347,379 |
| Total | 2,981 | 126,897,431 | 1,464 | 79,946,614 | 1,350 | 80,421,150 | 905 | 56,740,845 | 598 | 39,781,460 |


|  | $25-29$ |  | $30-34$ |  | $35-39$ |  | $40 \&$ Up |  | Total |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Age | No. | Salary | No. | Salary | No. | Salary | No. | Salary | No. | Salary |
| $\leq 20$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 49,231 |
| $20-24$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 214 | $6,912,443$ |
| $25-29$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 672 | $28,162,612$ |
| $30-34$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 840 | $39,306,764 \mid$ |
| $35-39$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 908 | $47,369,526$ |  |
| $40-44$ | 8 | 444,332 | 0 | 0 | 0 | 0 | 0 | 0 | 1,032 | $58,095,604$ |
| $45-49$ | 136 | $9,860,557$ | 5 | 267,806 | 0 | 0 | 0 | 0 | 1,187 | $69,997,812$ |
| $50-54$ | 178 | $11,706,204$ | 83 | $5,418,403$ | 10 | 652,937 | 0 | 0 | 1,230 | $70,724,739$ |
| $55-59$ | 161 | $10,317,942$ | 86 | $5,728,485$ | 75 | $4,895,090$ | 3 | 155,022 | 1,181 | $68,124,512$ |
| $60-64$ | 113 | $7,651,740$ | 74 | $5,442,774$ | 73 | $5,354,889$ | 34 | $2,579,099$ | 862 | $53,832,378$ |
| $65-69$ | 24 | $1,590,530$ | 25 | $1,665,092$ | 20 | $1,483,512$ | 20 | $1,457,951$ | 260 | $15,986,613$ |
| $70 \geq$ | 4 | 240,874 | 3 | 345,036 | 4 | 304,185 | 9 | 707,062 | 57 | $3,494,788$ |
| Total | 624 | $41,812,179$ | 276 | $18,867,596$ | 182 | $12,690,613$ | 66 | $4,899,134$ | 8,446 | $462,057,022$ |

## Schedule D: Summary Tables of Member Data (continued)

Table 2: Number and Annual Compensation of Active Members Distributed by Age and Service
General Employees - Group A

|  | 0-4 |  | 5-9 |  | 10-14 |  | 15-19 |  | 20-24 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age | No. | Salary | No. | Salary | No. | Salary | No. | Salary | No. | Salary |
| $\leq 20$ | 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 |
| $70 \geq$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |


|  | 25-29 |  | 30-34 |  | 35-39 |  | 40 \& Up |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age | No. | Salary | No. | Salary | No. | Salary | No. | Salary | No. | Salary |
| $\leq 20$ | 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 | 1 | 67,171 | 0 | 0 | 0 | 0 | 1 | 67,171 |
| 55-59 | 0 | 0 | 1 | 58,763 | 0 | 0 | 0 | 0 | 1 | 58,763 |
| 60-64 | 0 | 0 | 0 | 0 | 1 | 109,372 | 0 | 0 | 1 | 109,372 |
| 65-69 | 0 | 0 | $\underline{0}$ | 0 | 1 | 67,971 | 0 | $\underline{0}$ | 1 | 67,971 |
| $70 \geq$ | $\underline{0}$ | $\underline{0}$ | $\underline{0}$ | 0 | $\underline{0}$ | 0 | $\underline{2}$ | 129,136 | $\underline{2}$ | 129,136 |
| Total | 0 | 0 | 2 | 125,934 | 2 | 177,343 | 2 | 129,136 | 6 | 432,413 |

## Schedule D: Summary Tables of Member Data (continued)

Table 3: Number and annual Compensation of Active Members Distributed by Age and Service
Law Enforcement Personnel - Group C

|  | 0-4 |  | 5-9 |  | 10-14 |  | 15-19 |  | 20-24 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age | No. | Salary | No. | Salary | No. | Salary | No. | Salary | No. | Salary |
| $\leq 20$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 20-24 | 12 | 565,830 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 25-29 | 52 | 3,326,363 | 12 | 811,577 | 0 | 0 | 0 | 0 | 0 | 0 |
| 30-34 | 30 | 1,577,664 | 29 | 2,056,255 | 12 | 879,097 | 0 | 0 | 0 | 0 |
| 35-39 | 7 | 473,207 | 22 | 1,558,640 | 34 | 2,696,408 | 10 | 927,787 | 0 | 0 |
| 40-44 | 6 | 295,603 | 11 | 758,352 | 33 | 2,799,001 | 31 | 2,858,002 | 8 | 783,059 |
| 45-49 | 4 | 216,971 | 6 | 397,710 | 26 | 2,085,089 | 24 | 2,180,798 | 25 | 2,730,544 |
| 50-54 | 3 | 61,853 | 3 | 199,493 | 4 | 315,767 | 6 | 412,114 | 2 | 147,851 |
| 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 |
| $70 \geq$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 114 | 6,517,491 | 83 | 5,782,027 | 109 | 8,775,362 | 71 | 6,378,701 | 35 | 3,661,454 |


|  | 25-29 |  | 30-34 |  | 35-39 |  | 40 \& Up |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age | No. | Salary | No. | Salary | No. | Salary | No. | Salary | No. | Salary |
| $\leq 20$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 20-24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 565,830 |
| 25-29 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 64 | 4,137,940 |
| 30-34 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 71 | 4,513,016 |
| 35-39 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 73 | 5,656,042 |
| 40-44 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 89 | 7,494,017 |
| 45-49 | 21 | 2,303,480 | 0 | 0 | 0 | 0 | 0 | 0 | 106 | 9,914,592 |
| 50-54 | 7 | 472,497 | 2 | 177,985 | 0 | 0 | 0 | 0 | 27 | 1,787,560 |
| 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 |
| $70 \geq$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 28 | 2,775,977 | 2 | 177,985 | 0 | 0 | 0 | 0 | 442 | 34,068,997 |

## Schedule D: Summary Tables of Member Data (continued)

Table 4: Number and annual Compensation of Active Members Distributed by Age and Service
Judges - Group D

|  | 0-4 |  | 5-9 |  | 10-14 |  | 15-19 |  | 20-24 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age | No. | Salary | No. | Salary | No. | Salary | No. | Salary | No. | Salary |
| $\leq 20$ | 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 | 135,034 | 0 | 0 | 0 | 0 | 0 | 0 |
| 50-54 | 4 | 458,952 | 1 | 135,034 | 2 | 172,194 | 0 | 0 | 1 | 135,034 |
| 55-59 | 2 | 241,585 | 2 | 270,067 | 3 | 409,549 | 2 | 270,067 | 0 | 0 |
| 60-64 | 3 | 368,070 | 4 | 336,464 | 1 | 135,034 | 1 | 80,341 | 3 | 342,752 |
| 65-69 | 2 | 202,322 | 1 | 53,221 | 2 | 287,018 | 1 | 47,203 | 1 | 135,034 |
| $70 \geq$ | 1 | 13,176 | 0 | 0 | 1 | 46,499 | 0 | 0 | 1 | 135,034 |
| Total | 12 | 1,284,105 | 9 | 929,820 | 9 | 1,050,294 | 4 | 397,611 | 6 | 747,854 |


|  | 25-29 |  | 30-34 |  | 35-39 |  | 40 \& Up |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age | No. | Salary | No. | Salary | No. | Salary | No. | Salary | No. | Salary |
| $\leq 20$ | 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 | 1 | 135,034 |
| 50-54 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 901,214 |
| 55-59 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 1,191,268 |
| 60-64 | 2 | 194,293 | 3 | 405,101 | 0 | 0 | 0 | 0 | 17 | 1,862,055 |
| 65-69 | 0 | 0 | 0 | 0 | 1 | 142,027 | 0 | 0 | 8 | 866,825 |
| $70 \geq$ | 0 | 0 | 2 | 277,061 | 0 | 0 | 0 | 0 | 5 | 471,770 |
| Total | 2 | 194,293 | 5 | 682,162 | 1 | 142,027 | 0 | 0 | 48 | 5,428,166 |

## Schedule D: Summary Tables of Member Data (continued)

Table 5: Number and annual Compensation of Active Members Distributed by Age and Service
General Employees - Group F

|  | 0-4 |  | 5-9 |  | 10-14 |  | 15-19 |  | 20-24 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age | No. | Salary | No. | Salary | No. | Salary | No. | Salary | No. | Salary |
| $\leq 20$ | 3 | 49,231 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 20-24 | 199 | 6,225,188 | 3 | 121,425 | 0 | 0 | 0 | 0 | 0 | 0 |
| 25-29 | 542 | 20,759,772 | 66 | 3,264,900 | 0 | 0 | 0 | 0 | 0 | 0 |
| 30-34 | 502 | 21,184,833 | 194 | 9,818,074 | 73 | 3,790,841 | 0 | 0 | 0 | 0 |
| 35-39 | 380 | 16,131,578 | 223 | 11,886,499 | 181 | 10,635,265 | 50 | 3,023,844 | 1 | 36,298 |
| 40-44 | 321 | 13,894,677 | 191 | 10,759,306 | 206 | 12,154,809 | 156 | 9,605,220 | 61 | 3,743,244 |
| 45-49 | 284 | 12,494,705 | 192 | 10,512,512 | 184 | 10,401,753 | 153 | 9,333,215 | 147 | 9,381,119 |
| 50-54 | 262 | 11,490,463 | 169 | 8,899,782 | 212 | 12,475,607 | 165 | 9,878,485 | 125 | 8,164,568 |
| 55-59 | 207 | 9,303,311 | 179 | 9,641,375 | 190 | 10,594,536 | 151 | 8,791,493 | 120 | 7,480,990 |
| 60-64 | 128 | 6,334,974 | 107 | 5,779,523 | 132 | 7,721,072 | 109 | 6,561,102 | 80 | 5,144,543 |
| 65-69 | 19 | 851,453 | 43 | 2,331,183 | 44 | 2,303,550 | 39 | 2,369,500 | 19 | 1,209,044 |
| $70 \geq$ | 8 | 350,652 | 5 | 220,188 | 10 | 518,063 | 7 | 401,675 | 4 | 212,345 |
| Total | 2,855 | 119,070,837 | 1,372 | 73,234,767 | 1,232 | 70,595,496 | 830 | 49,964,534 | 557 | 35,372,151 |


|  | 25-29 |  | 30-34 |  | 35-39 |  | 40 \& Up |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age | No. | Salary | No. | Salary | No. | Salary | No. | Salary | No. | Salary |
| $\leq 20$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 49,231 |
| 20-24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 202 | 6,346,613 |
| 25-29 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 608 | 24,024,672 |
| 30-34 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 769 | 34,793,748 |
| 35-39 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 835 | 41,713,484 |
| 40-44 | 8 | 444,332 | 0 | 0 | 0 | 0 | 0 | 0 | 943 | 50,601,588 |
| 45-49 | 115 | 7,557,077 | 5 | 267,806 | 0 | 0 | 0 | 0 | 1,080 | 59,948,187 |
| 50-54 | 171 | 11,233,707 | 80 | 5,173,247 | 10 | 652,937 | 0 | 0 | 1,194 | 67,968,796 |
| 55-59 | 161 | 10,317,942 | 85 | 5,669,722 | 75 | 4,895,090 | 3 | 155,022 | 1,171 | 66,849,481 |
| 60-64 | 111 | 7,457,446 | 71 | 5,037,673 | 72 | 5,245,517 | 34 | 2,579,099 | 844 | 51,860,949 |
| 65-69 | 24 | 1,590,530 | 25 | 1,665,092 | 18 | 1,273,514 | 20 | 1,457,951 | 251 | 15,051,817 |
| $70 \geq$ | 4 | 240,874 | 1 | 67,975 | 4 | 304,185 | 7 | 577,926 | 50 | 2,893,883 |
| Total | 594 | 38,841,908 | 267 | 17,881,515 | 179 | 12,371,243 | 64 | 4,769,998 | 7,950 | 422,102,449 |

## Schedule D: Summary Tables of Member Data (continued)

Table 6: Summary of Retired Member and Beneficiary Data by Attained Age
All Employees

|  | Service Pensioners |  | Disability Pensioners |  | Beneficiaries |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number | Annual Allowance | Number | Annual Allowance | Number | Annual Allowance |
| $\leq 30$ | 0 | \$ 0 | 0 | \$ 0 | 46 | \$ 289,950 |
| 31 | 0 | 0 | 1 | 35,022 | 0 | 0 |
| 34 | 0 | 0 | 1 | 8,981 | 0 | 0 |
| 35 | 0 | 0 | 0 | 0 | 1 | 7,191 |
| 37 | 0 | 0 | 1 | 10,842 | 1 | 5,399 |
| 40 | 0 | 0 | 1 | 10,127 | 0 | 0 |
| 41 | 0 | 0 | 0 | 0 | 1 | 9,649 |
| 42 | 0 | 0 | 2 | 36,116 | 1 | 7,891 |
| 43 | 0 | 0 | 2 | 27,469 | 3 | 31,167 |
| 44 | 1 | 2,547 | 2 | 26,827 | 1 | 9,846 |
| 45 | 1 | 29,561 | 5 | 64,890 | 1 | 11,480 |
| 46 | 0 | 0 | 2 | 28,251 | 2 | 26,740 |
| 47 | 1 | 24,977 | 4 | 91,719 | 4 | 47,912 |
| 48 | 4 | 102,858 | 2 | 55,267 | 0 | 0 |
| 49 | 3 | 64,132 | 5 | 173,191 | 1 | 7,397 |
| 50 | 9 | 485,119 | 8 | 168,494 | 2 | 32,787 |
| 51 | 18 | 808,520 | 6 | 137,685 | 4 | 69,893 |
| 52 | 22 | 1,032,756 | 8 | 107,993 | 1 | 7,654 |
| 53 | 31 | 962,514 | 12 | 176,962 | 3 | 33,223 |
| 54 | 24 | 794,113 | 12 | 160,156 | 5 | 81,234 |
| 55 | 50 | 1,652,986 | 5 | 72,293 | 7 | 81,446 |
| 56 | 56 | 1,547,603 | 10 | 111,807 | 3 | 22,533 |
| 57 | 71 | 2,221,360 | 8 | 99,781 | 13 | 210,472 |
| 58 | 76 | 2,425,207 | 10 | 166,231 | 8 | 148,176 |
| 59 | 93 | 2,211,380 | 8 | 121,067 | 11 | 130,799 |
| 60 | 107 | 3,009,734 | 16 | 186,558 | 14 | 122,171 |
| 61 | 134 | 3,061,916 | 15 | 164,570 | 18 | 244,048 |
| 62 | 193 | 3,833,334 | 19 | 267,754 | 18 | 249,872 |
| 63 | 232 | 4,168,371 | 25 | 260,152 | 7 | 81,541 |
| 64 | 251 | 5,002,166 | 17 | 226,449 | 19 | 196,524 |
| 65 | 303 | 6,171,674 | 16 | 221,146 | 13 | 132,885 |
| 66 | 290 | 5,421,016 | 23 | 296,728 | 10 | 112,005 |
| 67 | 313 | 5,915,744 | 14 | 169,779 | 20 | 309,342 |
| 68 | 332 | 6,720,586 | 12 | 207,243 | 19 | 246,603 |
| 69 | 218 | 4,350,225 | 13 | 156,599 | 15 | 217,044 |
| 70 | 214 | 3,878,672 | 7 | 84,042 | 17 | 159,718 |
| 71 | 198 | 3,368,906 | 13 | 169,421 | 26 | 344,909 |
| 72 | 222 | 4,098,445 | 10 | 110,163 | 22 | 286,778 |
| 73 | 182 | 3,458,817 | 8 | 70,249 | 20 | 257,256 |
| 74 | 150 | 2,387,190 | 7 | 78,853 | 20 | 248,079 |

## Schedule D: Summary Tables of Member Data (continued)

Table 6: Summary of Retired Member and Beneficiary Data by Attained Age (continued)
All Employees (continued)

|  | Service Pensioners |  | Disability Pensioners |  | Beneficiaries |  |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Age | Number | Annual Allowance | Number | Annual Allowance | Number | Annual Allowance |
| 75 | 141 | $2,215,708$ | 7 | 102,302 | 20 | $171,241.00$ |
| 76 | 125 | $1,796,885$ | 3 | 16,995 | 20 | 234,349 |
| 77 | 102 | $1,619,410$ | 9 | 106,876 | 12 | 143,804 |
| 78 | 105 | $1,712,875$ | 6 | 49,254 | 11 | 106,204 |
| 79 | 124 | $1,965,395$ | 4 | 31,337 | 21 | 273,457 |
| 80 | 94 | $1,597,265$ | 4 | 35,045 | 24 | 267,030 |
| 81 | 92 | $1,407,138$ | 1 | 8,43 | 16 | 144,667 |
| 82 | 90 | $1,179,652$ | 3 | 17,954 | 12 | 186,394 |
| 83 | 71 | 806,153 | 2 | 16,777 | 15 | 158,093 |
| 84 | 81 | $1,072,251$ | 1 | 4,708 | 21 | 282,194 |
| 85 | 69 | 872,734 | 1 | 6,254 | 17 | 198,896 |
| 86 | 55 | 746,791 | 0 | 0 | 13 | 159,284 |
| 87 | 36 | 524,505 | 2 | 35,076 | 18 | 172,861 |
| 88 | 35 | 503,223 | 1 | 7,340 | 5 | 33,384 |
| 89 | 40 | 509,355 | 0 | 0 | 10 | 69,121 |
| 90 | 29 | 307,055 | 0 | 0 | 10 | 111,228 |
| 91 | 20 | 218,337 | 1 | 9,283 | 7 | 36,821 |
| 92 | 24 | 279,343 | 2 | 26,558 | 3 | 65,437 |
| 93 | 12 | 90,835 | 0 | 0 | 4 | 50,792 |
| 94 | 9 | 88,006 | 1 | 14,926 | 7 | 73,011 |
| 95 | 11 | 80,494 | 0 | 0 | 1 | 7,811 |
| 96 | 5 | 50,587 | 0 | 0 | 1 | 7,665 |
| 97 | 3 | 46,509 | 0 | 0 | 0 | 3 |

## Schedule D: Summary Tables of Member Data (continued)

Table 7: Summary of Retired Member and Beneficiary Data by Attained Age
General Employees - Group A

|  | Service Pensioners |  | Disability Pensioners |  | Beneficiaries |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number | Annual Allowance | Number | Annual Allowance | Number | Annual Allowance |
| 56 | 0 | \$ 0 | 0 | \$ 0 | 0 | \$ 0 |
| 59 | 1 | 52,851 | 0 | 0 | 1 | 6,838 |
| 60 | 2 | 82,314 | 1 | 14,256 | 0 | 0 |
| 61 | 1 | 1,512 | 0 | 0 | 0 | 0 |
| 62 | 0 | 0 | 1 | 16,514 | 1 | 9,000 |
| 63 | 4 | 99,056 | 1 | 7,262 | 0 | 0 |
| 64 | 3 | 74,705 | 0 | 0 | 0 | 0 |
| 65 | 2 | 40,157 | 0 | 0 | 0 | 0 |
| 66 | 4 | 101,013 | 1 | 20,672 | 0 | 0 |
| 67 | 5 | 124,289 | 1 | 7,656 | 1 | 22,838 |
| 68 | 4 | 104,322 | 0 | 0 | 1 | 37,703 |
| 69 | 7 | 196,020 | 1 | 17,840 | 0 | 0 |
| 70 | 0 | 0 | 0 | 0 | 1 | 5,471 |
| 71 | 3 | 88,613 | 0 | 0 | 2 | 19,153 |
| 72 | 0 | 0 | 0 | 0 | 1 | 14,118 |
| 73 | 6 | 188,054 | 0 | 0 | 2 | 24,085 |
| 74 | 5 | 107,089 | 0 | 0 | 3 | 37,609 |
| 75 | 3 | 56,780 | 0 | 0 | 0 | 0 |
| 76 | 6 | 173,450 | 0 | 0 | 0 | 0 |
| 77 | 4 | 88,477 | 1 | 11,246 | 0 | 0 |
| 78 | 7 | 139,622 | 1 | 12,231 | 0 | 0 |
| 79 | 4 | 105,557 | 1 | 10,012 | 0 | 0 |
| 80 | 10 | 272,193 | 0 | 0 | 0 | 0 |
| 81 | 4 | 92,256 | 0 | 0 | 0 | 0 |
| 82 | 3 | 81,170 | 0 | 0 | 0 | 0 |
| 83 | 2 | 31,181 | 0 | 0 | 2 | 20,424 |
| 84 | 5 | 136,722 | 0 | 0 | 3 | 35,837 |
| 85 | 7 | 147,541 | 0 | 0 | 2 | 10,865 |
| 86 | 5 | 87,534 | 0 | 0 | 1 | 10,219 |
| 87 | 3 | 61,582 | 2 | 35,076 | 3 | 30,232 |
| 88 | 1 | 7,234 | 1 | 7,340 | 2 | 13,514 |
| 89 | 5 | 71,059 | 0 | 0 | 7 | 59,105 |
| 90 | 2 | 32,841 | 0 | 0 | 2 | 20,836 |
| 91 | 4 | 54,234 | 1 | 9,283 | 2 | 10,381 |
| 92 | 4 | 35,079 | 2 | 26,558 | 0 | 0 |
| 93 | 2 | 20,014 | 0 | 0 | 1 | 7,481 |
| 94 | 4 | 38,879 | 1 | 14,926 | 5 | 64,286 |
| 95 | 5 | 32,607 | 0 | 0 | 1 | 7,811 |
| 96 | 3 | 37,616 | 0 | 0 | 1 | 7,665 |
| 97 | 2 | 24,600 | 0 | 0 | 2 | 18,415 |

## Schedule D: Summary Tables of Member Data (continued)

Table 7: Summary of Retired Member and Beneficiary Data by Attained Age (continued)
General Employees - Group A (continued)

|  | Service Pensioners |  | Disability Pensioners |  | Beneficiaries |  |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Age | Number | Annual Allowance | Number | Annual Allowance | Number | Annual Allowance |
| 99 | 3 | 31,161 | 0 | 0 | 0 | 0 |
| 100 | 1 | 24,654 | 0 | 0 | 1 | 2,329 |
| Total | 146 | $3,144,038$ | 16 | 210,872 | 48 | 496,215 |

## Schedule D: Summary Tables of Member Data (continued)

Table 8: Summary of Retired Member and Beneficiary Data by Attained Age
State Police and Motor Vehicle Inspectors - Group B

| Service Pensioners |  |  | Disability Pensioners |  | Beneficiaries |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number | Annual Allowance | Number | Annual Allowance | Number | Annual Allowance |
| 56 | 0 | \$ 0 | 0 | \$ 0 | 1 | \$ 19,733 |
| 57 | 1 | 11,146 | 0 | 0 | 0 | 0 |
| 61 | 1 | 9,575 | 0 | 0 | 0 | 0 |
| 64 | 0 | 0 | 0 | 0 | 1 | 4,873 |
| 66 | 0 | 0 | 1 | 20,517 | 0 | 0 |
| 67 | 0 | 0 | 0 | 0 | 1 | 12,898 |
| 68 | 2 | 41,249 | 0 | 0 | 0 | 0 |
| 69 | 2 | 64,898 | 0 | 0 | 0 | 0 |
| 71 | 0 | 0 | 1 | 21,416 | 0 | 0 |
| 72 | 1 | 8,839 | 0 | 0 | 1 | 16,941 |
| 73 | 1 | 25,634 | 0 | 0 | 0 | 0 |
| Total | 8 | 161,341 | 2 | 41,933 | 4 | 54,445 |

## Schedule D: Summary Tables of Member Data (continued)

Table 9: Summary of Retired Member and Beneficiary Data by Attained Age
Law Enforcement Personnel - Group C

|  | Service Pensioners |  | Disability Pensioners |  | Beneficiaries |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number | Annual Allowance | Number | Annual Allowance | Number | Annual Allowance |
| <31 | 0 | \$ 0 | 0 | \$ 0 | 17 | \$ 150,648 |
| 32 | 0 | 0 | 1 | 35,022 | 0 | 0 |
| 42 | 0 | 0 | 1 | 30,634 | 0 | 0 |
| 43 | 0 | 0 | 1 | 17,618 | 1 | 12,054 |
| 44 | 1 | 2,547 | 0 | 0 | 0 | 0 |
| 46 | 0 | 0 | 0 | 0 | 1 | 12,693 |
| 47 | 0 | 0 | 1 | 41,659 | 2 | 36,440 |
| 48 | 0 | 0 | 1 | 44,481 | 0 | 0 |
| 49 | 0 | 0 | 3 | 152,846 | 0 | 0 |
| 50 | 7 | 424,065 | 2 | 93,640 | 0 | 0 |
| 51 | 8 | 485,800 | 2 | 75,445 | 1 | 23,275 |
| 52 | 11 | 695,220 | 1 | 25,784 | 0 | 0 |
| 53 | 9 | 368,909 | 0 | 0 | 0 | 0 |
| 54 | 5 | 291,356 | 1 | 54,768 | 1 | 23,164 |
| 55 | 17 | 889,523 | 0 | 0 | 1 | 17,025 |
| 56 | 13 | 578,220 | 0 | 0 | 1 | 3,927 |
| 57 | 15 | 893,009 | 1 | 36,077 | 1 | 20,211 |
| 58 | 17 | 1,002,036 | 1 | 45,050 | 2 | 66,505 |
| 59 | 14 | 653,215 | 1 | 37,962 | 1 | 35,460 |
| 60 | 16 | 1,016,086 | 0 | 0 | 2 | 35,584 |
| 61 | 6 | 383,878 | 0 | 0 | 2 | 40,363 |
| 62 | 13 | 626,808 | 2 | 72,985 | 2 | 42,484 |
| 63 | 7 | 332,993 | 0 | 0 | 2 | 17,719 |
| 64 | 4 | 236,359 | 0 | 0 | 2 | 36,006 |
| 65 | 13 | 582,061 | 1 | 34,792 | 1 | 7,800 |
| 66 | 4 | 141,383 | 1 | 30,578 | 0 | 0 |
| 67 | 8 | 317,275 | 1 | 44,034 | 3 | 87,322 |
| 68 | 13 | 582,875 | 2 | 80,025 | 2 | 43,733 |
| 69 | 9 | 398,125 | 1 | 42,378 | 2 | 45,834 |
| 70 | 1 | 27,141 | 1 | 34,094 | 0 | 0 |
| 71 | 5 | 188,121 | 1 | 32,691 | 3 | 85,700 |
| 72 | 10 | 461,568 | 0 | 0 | 2 | 63,178 |
| 73 | 7 | 300,402 | 0 | 0 | 1 | 28,085 |
| 74 | 5 | 187,318 | 0 | 0 | 3 | 94,517 |
| 75 | 4 | 174,099 | 1 | 29,559 | 1 | 20,462 |
| 76 | 3 | 131,159 | 0 | 0 | 2 | 48,443 |
| 77 | 3 | 140,790 | 1 | 28,303 | 2 | 36,077 |
| 78 | 3 | 147,706 | 0 | 0 | 1 | 18,578 |
| 79 | 2 | 73,636 | 0 | 0 | 1 | 37,701 |
| 80 | 3 | 139,975 | 0 | 0 | 3 | 106,960 |

## Schedule D: Summary Tables of Member Data (continued)

Table 9: Summary of Retired Member and Beneficiary Data by Attained Age (continued)
Law Enforcement Personnel - Group C (continued)

|  | Service Pensioners |  | Disability Pensioners |  | Beneficiaries |  |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Age | Number | Annual Allowance | Number | Annual Allowance | Number | Annual Allowance |
| 81 | 2 | 69,154 | 0 | 0 | 1 | 31,532 |
| 82 | 3 | 117,760 | 0 | 0 | 4 | 119,912 |
| 83 | 3 | 106,455 | 0 | 0 | 1 | 30,254 |
| 84 | 5 | 168,569 | 0 | 0 | 5 | 112,332 |
| 85 | 2 | 89,318 | 0 | 0 | 4 | 82,886 |
| 86 | 5 | 200,756 | 0 | 0 | 1 | 28,580 |
| 87 | 0 | 0 | 0 | 0 | 2 | 54,084 |
| 88 | 1 | 42,478 | 0 | 0 | 0 | 0 |
| 89 | 1 | 37,376 | 0 | 0 | 3 | 0 |
| 94 | 1 | 18,499 | 0 | 0 |  | 0 |
| Total | 279 | $13,724,023$ | 29 | $1,120,425$ | 87 | 0 |

## Schedule D: Summary Tables of Member Data (continued)

Table 10: Summary of Retired Member and Beneficiary Data by Attained Age
Judges - Group D

|  | Service Pensioners |  | Disability Pensioners |  | Beneficiaries |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number | Annual Allowance | Number | Annual Allowance | Number | Annual Allowance |
| <=56 | 0 | \$ 0 | 0 | \$ 0 | 1 | \$ 11,095 |
| 57 | 1 | 25,654 | 0 | 0 | 0 | 0 |
| 60 | 1 | 22,153 | 0 | 0 | 0 | 0 |
| 62 | 1 | 79,283 | 0 | 0 | 1 | 39,642 |
| 64 | 2 | 145,620 | 0 | 0 | 0 | 0 |
| 65 | 3 | 251,366 | 0 | 0 | 0 | 0 |
| 66 | 4 | 238,762 | 0 | 0 | 0 | 0 |
| 67 | 2 | 198,799 | 0 | 0 | 0 | 0 |
| 68 | 2 | 184,071 | 0 | 0 | 0 | 0 |
| 69 | 2 | 44,234 | 0 | 0 | 1 | 26,419 |
| 70 | 1 | 16,614 | 0 | 0 | 0 | 0 |
| 71 | 0 | 0 | 0 | 0 | 1 | 34,164 |
| 72 | 4 | 280,201 | 0 | 0 | 0 | 0 |
| 73 | 3 | 251,969 | 0 | 0 | 0 | 0 |
| 75 | 1 | 74,902 | 0 | 0 | 0 | 0 |
| 76 | 1 | 35,136 | 0 | 0 | 0 | 0 |
| 77 | 1 | 80,185 | 0 | 0 | 0 | 0 |
| 78 | 3 | 171,128 | 0 | 0 | 0 | 0 |
| 79 | 2 | 147,835 | 0 | 0 | 1 | 32,964 |
| 80 | 1 | 99,106 | 0 | 0 | 0 | 0 |
| 82 | 1 | 95,850 | 0 | 0 | 0 | 0 |
| 83 | 2 | 64,793 | 0 | 0 | 0 | 0 |
| 85 | 1 | 39,431 | 0 | 0 | 1 | 28,626 |
| 86 | 0 |  | 0 | 0 | 1 | 66,304 |
| 87 | 2 | 137,029 | 0 | 0 | 0 | 0 |
| 88 | 2 | 133,949 | 0 | 0 | 0 | 0 |
| 89 | 1 | 39,498 | 0 | 0 | 0 | 0 |
| 90 | 2 | 67,873 | 0 | 0 | 0 | 0 |
| 91 | 1 | 9,962 | 0 | 0 | 0 | 0 |
| 92 | 1 | 57,328 | 0 | 0 | 1 | 47,833 |
| 93 | 0 | 0 | 0 | 0 | 2 | 38,097 |
| 97 | 1 | 21,909 | 0 | 0 | 0 | 0 |
| 98 | 0 | 0 | 0 | 0 | 1 | 39,141 |
| Total | 49 | 3,014,640 | 0 | 0 | 11 | 364,285 |

## Schedule D: Summary Tables of Member Data (continued)

Table 11: Summary of Retired Member and Beneficiary Data by Attained Age
General Employees - Group E/F

|  | Service Pensioners |  | Disability Pensioners |  | Beneficiaries |  |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Age | Number | Annual Allowance | Number | Annual Allowance | Number | Annual Allowance |
| $\leq 34$ | 0 | $\$$ | 0 | 0 | $\$$ | 0 |

## Schedule D: Summary Tables of Member Data (continued)

Table 11: Summary of Retired Member and Beneficiary Data by Attained Age (continued)
General Employees - Group E/F (continued)

|  | Service Pensioners |  | Disability Pensioners |  | Beneficiaries |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number | Annual Allowance | Number | Annual Allowance | Number | Annual Allowance |
| 76 | 115 | 1,457,140 | 3 | 16,995 | 18 | 185,906 |
| 77 | 94 | 1,309,958 | 7 | 67,327 | 10 | 107,727 |
| 78 | 92 | 1,254,419 | 5 | 37,023 | 10 | 87,626 |
| 79 | 116 | 1,638,367 | 3 | 21,325 | 19 | 202,792 |
| 80 | 80 | 1,085,991 | 4 | 35,045 | 21 | 160,070 |
| 81 | 86 | 1,245,728 | 1 | 8,431 | 15 | 113,135 |
| 82 | 83 | 884,872 | 3 | 17,954 | 8 | 66,482 |
| 83 | 64 | 603,724 | 2 | 16,777 | 12 | 107,415 |
| 84 | 71 | 766,960 | 1 | 4,708 | 13 | 134,025 |
| 85 | 59 | 596,444 | 1 | 6,254 | 10 | 76,519 |
| 86 | 45 | 458,501 | 0 | 0 | 10 | 54,181 |
| 87 | 31 | 325,894 | 0 | 0 | 13 | 88,545 |
| 88 | 31 | 319,562 | 0 | 0 | 3 | 19,870 |
| 89 | 33 | 361,422 | 0 | 0 | 3 | 10,016 |
| 90 | 25 | 206,341 | 0 | 0 | 5 | 27,005 |
| 91 | 15 | 154,141 | 0 | 0 | 5 | 26,440 |
| 92 | 19 | 186,936 | 0 | 0 | 2 | 17,604 |
| 93 | 10 | 70,821 | 0 | 0 | 1 | 5,214 |
| 94 | 4 | 30,628 | 0 | 0 | 2 | 8,725 |
| 95 | 6 | 47,887 | 0 | 0 | 0 | 0 |
| 96 | 2 | 12,971 | 0 | 0 | 0 | 0 |
| 97 | 0 | 0 | 0 | 0 | 1 | 12,087 |
| Total | 4,694 | 78,914,708 | 331 | 3,676,763 | 500 | 4,771,470 |

Schedule D: Summary Tables of Member Data (continued)
Table 12: Summary of Retired Member and Beneficiary Data by Year of Retirement

| Year of Retirement | Number | Annual Allowance | Annual Allowance |
| :---: | :---: | :---: | :---: |
| 1970 | 2 | \$ 10,098 | \$ 5,049 |
| 1972 | 2 | 29,878 | 14,939 |
| 1974 | 2 | 17,330 | 8,665 |
| 1975 | 2 | 28,997 | 14,499 |
| 1976 | 1 | 8,179 | 8,179 |
| 1977 | 4 | 42,144 | 10,536 |
| 1978 | 4 | 61,919 | 15,480 |
| 1979 | 6 | 101,804 | 16,967 |
| 1980 | 10 | 76,686 | 7,669 |
| 1981 | 6 | 75,213 | 12,536 |
| 1982 | 15 | 153,741 | 10,249 |
| 1983 | 17 | 188,333 | 11,078 |
| 1984 | 20 | 348,750 | 17,438 |
| 1985 | 30 | 381,096 | 12,703 |
| 1986 | 34 | 433,063 | 12,737 |
| 1987 | 49 | 632,460 | 12,907 |
| 1988 | 48 | 752,227 | 15,671 |
| 1989 | 53 | 794,818 | 14,997 |
| 1990 | 88 | 1,023,498 | 11,631 |
| 1991 | 92 | 1,475,586 | 16,039 |
| 1992 | 64 | 601,730 | 9,402 |
| 1993 | 99 | 1,374,471 | 13,884 |
| 1994 | 69 | 930,398 | 13,484 |
| 1995 | 116 | 1,489,598 | 12,841 |
| 1996 | 364 | 5,770,464 | 15,853 |
| 1997 | 101 | 1,756,004 | 17,386 |
| 1998 | 101 | 1,627,912 | 16,118 |
| 1999 | 134 | 2,084,096 | 15,553 |
| 2000 | 166 | 2,498,527 | 15,051 |
| 2001 | 169 | 2,459,756 | 14,555 |
| 2002 | 182 | 3,169,985 | 17,418 |
| 2003 | 201 | 3,818,191 | 18,996 |
| 2004 | 264 | 5,177,568 | 19,612 |
| 2005 | 262 | 4,695,614 | 17,922 |
| 2006 | 259 | 5,116,091 | 19,753 |
| 2007 | 293 | 5,533,430 | 18,885 |
| 2008 | 307 | 6,168,179 | 20,092 |
| 2009 | 520 | 10,649,228 | 20,479 |
| 2010 | 366 | 7,340,590 | 20,056 |
| 2011 | 352 | 6,775,991 | 19,250 |
| 2012 | 364 | 7,124,900 | 19,574 |
| 2013 | 338 | 6,476,036 | 19,160 |
| 2014 | 372 | 7,182,402 | 19,308 |
| 2015 | 256 | 5,059,092 | 19,762 |
| Total | 6,204 | 111,516,073 | 18,648 |

Schedule E: Amortization Schedule for the Unfunded Actuarial Accrued Liability

| Date | Balance | Amortization <br> Payment <br> (Year Following) |
| :---: | :---: | :---: |
| $6 / 30 / 2015$ | $542,558,818$ | $32,687,873$ |
| $6 / 30 / 2016$ | $551,729,874$ | $34,322,267$ |
| $6 / 30 / 2017$ | $559,931,911$ | $36,038,380$ |
| $6 / 30 / 2018$ | $567,002,986$ | $37,840,299$ |
| $6 / 30 / 2019$ | $572,764,035$ | $39,732,314$ |
| $6 / 30 / 2020$ | $577,017,303$ | $41,718,930$ |
| $6 / 30 / 2021$ | $579,544,632$ | $43,804,876$ |
| $6 / 30 / 2022$ | $580,105,607$ | $45,995,120$ |
| $6 / 30 / 2023$ | $578,435,538$ | $48,294,876$ |
| $6 / 30 / 2024$ | $574,243,276$ | $50,709,620$ |
| $6 / 30 / 2025$ | $567,208,834$ | $53,245,101$ |
| $6 / 30 / 2026$ | $556,980,815$ | $55,907,356$ |
| $6 / 30 / 2027$ | $543,173,612$ | $58,702,723$ |
| $6 / 30 / 2028$ | $525,364,377$ | $61,637,860$ |
| $6 / 30 / 2029$ | $503,089,732$ | $64,719,753$ |
| $6 / 30 / 2030$ | $475,842,197$ | $67,955,740$ |
| $6 / 30 / 2031$ | $443,066,324$ | $71,353,527$ |
| $6 / 30 / 2032$ | $404,154,504$ | $74,921,204$ |
| $6 / 30 / 2033$ | $358,442,413$ | $78,667,264$ |
| $6 / 30 / 2034$ | $305,204,093$ | $82,600,627$ |
| $6 / 30 / 2035$ | $243,646,602$ | $86,730,658$ |
| $6 / 30 / 2036$ | $172,904,229$ | $91,067,191$ |
| $6 / 30 / 2037$ | $92,032,224$ | $95,620,551$ |
| $6 / 30 / 2038$ |  | 0 |

## Schedule F: Projection of Contributions for Following Two Fiscal Years

On the basis of the June 30, 2015 actuarial valuation, the recommended contribution for the fiscal year ending June 30,2016 , is $\$ 46,226,144$, which is based on the following:

| Payroll | \$ | $462,057,022$ |
| :--- | ---: | ---: |
| Normal rate |  | $2.93 \%$ |
| Accrued liability contribution | $\$$ | $32,687,873$ |

The projections for the following two years are as follows:

|  |  |  | Contributions |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Fiscal Year | Projected Payroll | Normal Rate $^{1}$ | Normal | Accrued Liability | Total |
| 2017 | $\$ 478,229,018$ | $2.93 \%$ | $\$ 14,181,091$ | $\$ 34,322,267$ | $\$ 48,503,358$ |
| 2018 | $494,967,034$ | $2.93 \%$ | $14,870,162$ | $\$ 36,038,380$ | $\$ 50,908,542$ |

[^3]
[^0]:    ${ }^{1}$ Increased during first 10 years of service.

[^1]:    ${ }^{1}$ All Group $A$ and $D$ members are assumed to retire when first eligible.

[^2]:    ${ }^{1}$ Increased during first 10 years of service.
    $20 \%$ of disabilities and $30 \%$ of deaths assumed to be accidental.

[^3]:    ${ }^{1}$ In these projections, total payroll is assumed to increase by $3.5 \%$ each year. The offset to normal cost paid by the State is constrained in accordance with the provisions of Act 63, Section 473 of the 2011 Legislative Session.

