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**CONNECTICUT POLICEMEN AND FIREMEN
SURVIVORS' BENEFIT FUND
EXPERIENCE INVESTIGATION**

**For The Period
July 1, 2003 - June 30, 2007**

February 10, 2009

State Employees Retirement Commission
Office of the State Comptroller
55 Elm Street
Hartford, CT 06106

Members of the Commission:

Submitted in this letter are the results of an investigation of demographic (non-economic) and economic experience for the Connecticut Policemen and Firemen Survivors' Benefit Fund (SBF).

As you may recall from our discussion at the Commission meeting in February 2008, we received data for the 2007 SBF valuation from MERS rather than the participating municipalities as had been done in prior years. During this process it was determined that significant changes in demographic data occurred and that the SBF data submitted was not reliable. As a result, we deemed the data to be not credible for a demographic experience study. We discussed our concerns with MERS staff and it was decided to change the SBF demographic assumptions to match those used for the Police and Fire groups participating in MERS. As further support for this decision, most of the members in the SBF are also in MERS, so it is reasonable to apply the same assumptions to the two Police and Fire plans.

This results letter also includes a review of the Fund's economic assumptions. These include the component parts of both the interest rate (real rate of return and price inflation) and salary increase rates (wage inflation and merit/seniority).

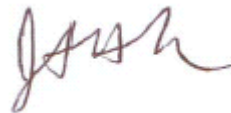
The investigation covers the four-year period from July 1, 2003 through June 30, 2007.

The Table of Contents, which immediately follows, outlines the material contained in this report.

Respectfully submitted,



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Enclosure
SBF exp study results letter final.doc

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**CONNECTICUT POLICEMEN AND FIREMEN SURVIVORS' BENEFIT FUND
EXPERIENCE INVESTIGATION**

Summary of Findings

The four-year period (July 1, 2003 to June 30, 2007) covered by this experience investigation provided sufficient data to form a basis for recommending changes in the economic assumptions used in the actuarial valuations of the Connecticut Policemen and Firemen Survivors' Benefit Fund (SBF). Please refer to the comments in the cover letter regarding the demographic assumptions.

The recommended changes in actuarial assumptions resulting from this experience investigation are summarized below. We recommend that these proposed changes first be reflected in the June 30, 2008 actuarial valuation of the SBF.

Demographic Changes:

Actives:

- Change all assumptions to match those of the Police and Fire groups in MERS. The most significant change was an increase in the rates of retirement from ages 45 through 52.

Pensioners:

- Change all mortality assumptions to match those of the Police and Fire groups in MERS. The most significant change was a decrease in the rates of mortality for male service retirees and beneficiaries, where the mortality table was changed from a 1951 Group Annuity based table to the RP-2000 table set forward one year. For female service retirees and beneficiaries the mortality changed from the 1983 Group Annuity table to the RP-2000 table set back one year.

Economic Changes:

- Reduce the overall interest rate from 8.50% to 8.00%.
- Reduce the price inflation assumption from 3.75% to 3.50%.
- Reduce the real rate of return assumption from 4.75% to 4.50%.

The table below highlights the impact on certain valuation results if the recommended demographic and economic assumption changes listed on the previous page had been in place for the June 30, 2007 valuation.

| Item | June 30, 2007 Valuation Results | With Demographic Assumption Changes | With Demographic and Economic Assumption Changes |
|---|------------------------------------|--|--|
| Actuarial Liability | | | |
| Annuitants | \$6,676,000 | \$6,218,000 | \$6,428,000 |
| Retirees | 8,595,000 | 6,920,000 | 7,476,000 |
| Actives | 11,840,000 | 7,983,000 | 9,108,000 |
| Inactives | <u>104,000</u> | <u>104,000</u> | <u>104,000</u> |
| Total | \$27,215,000 | \$21,225,000 | \$23,116,000 |
| Employer Normal Cost Rate (% of payroll) * | 0.22% | (1.40)% | (0.73)% |

* A negative employer normal cost rate results in no required contribution. Rather than show a 0% contribution rate, the negative rates were presented to illustrate the impact of the recommended changes in assumptions.

Investment Return Results

Historical experience was used when evaluating the Fund's current economic assumptions. The investment return of the assets of the Fund over the July 1, 2003 - June 30, 2007 period was as follows:

| Fiscal Year Ended June 30 | Total Return on Assets | | Rate of Inflation |
|--------------------------------------|-------------------------------|---------------------|--------------------------|
| | Actuarial Value | Market Value | |
| 2004 | 5.19% | 8.67% | 3.27% |
| 2005 | 5.55 | 7.58 | 2.53 |
| 2006 | 5.43 | 5.11 | 4.32 |
| 2007 | 6.53 | 11.92 | 2.69 |
| Average | 5.67% | 8.29% | 3.20% |

The assets are valued using an asset-smoothing methodology that recognizes i) 20% of any difference between actual and expected investment income (gain/loss) in the valuation year and ii) 20% of any previous years' unrecognized investment gains/losses. Such smoothed actuarial asset value shall not be less than 80% or greater than 120% of the market value of assets. The expected investment income is based on the System's assumed interest rate. The current interest rate assumption is 8.50%, which is higher than the 5.67% four-year actuarial rate of return reported above. The inflation component of the current assumption is 3.75%, which is slightly higher than the 3.20% actual average shown above.

Interest rate assumptions are based on two components: real rate of return and price inflation. Due to the short-term volatility of these variables and the long-term nature of a pension plan, current practice views the interest rate assumption as long-term. Therefore, short-term periods should not overly influence this rate.

For comparison purposes, historical rates of return and price inflation were developed over varying periods of time for a sample portfolio that is likely to represent the asset mix of the System for the foreseeable future. The sample portfolio is one consisting of 45% common stocks, 25% long term government bonds, 25% corporate bonds, and 5% real estate. The rates below and the table on the next page show information on historical patterns of investment return and inflation gathered from Ibbotson. Such data are as follows:

| <u>Period Ending 6/30/2007</u> | <u>Sample Portfolio Real Rate of Return</u> | <u>Rate of Price Inflation</u> |
|--------------------------------|---|--------------------------------|
| 10 years | 3.9% | 2.7% |
| 30 years | 6.9 | 4.1 |

HISTORICAL PATTERNS OF INVESTMENT RETURN AND INFLATION

| Calendar Year Period | Gross Market Returns | | | Stocks (S&P 500) | Wage Inflation (NAW) | Price Inflation (CPI) | System's Sample Portfolio* | |
|----------------------|-----------------------|------------------------|--------------------|------------------|----------------------|-----------------------|----------------------------|---------------------------------|
| | Bonds (Long) | | Real Estate (REIT) | | | | Nominal Total Return (I) | Real Rate of Return (I) – (CPI) |
| | Nominal U.S. Treasury | Nominal Corp. (S&P AA) | | | | | | |
| 1940-49 | 3.2% | 2.7% | N/A | 9.2% | 7.8% | 5.4% | N/A | N/A |
| 1950-59 | (0.1) | 1.0 | N/A | 19.4 | 4.6 | 2.2 | N/A | N/A |
| 1960-69 | 1.4 | 1.7 | N/A | 7.8 | 4.3 | 2.5 | N/A | N/A |
| 1970-79 | 5.5 | 6.2 | 4.8 | 5.9 | 6.9 | 7.4 | 5.8 | (1.6) |
| 1980-89 | 12.6 | 13.0 | 12.5 | 17.5 | 5.8 | 5.1 | 14.9 | 9.8 |
| 1990-99 | 8.8 | 8.4 | 8.1 | 18.2 | 4.2 | 2.9 | 12.9 | 10.0 |
| 2000-07 | 7.0 | 6.3 | 12.7 | 1.3 | 2.9 | 2.2 | 4.5 | 2.3 |
| Last 10 Years | 7.3% | 6.6% | 9.6% | 5.9% | 4.0% | 2.7% | 6.6% | 3.9% |
| Last 30 Years | 9.3% | 9.0% | 12.0% | 13.0% | 4.8% | 4.1% | 11.0% | 6.9% |
| Last 50 Years | 6.8% | 6.9% | N/A | 11.0% | 4.9% | 4.1% | N/A | N/A |

| *Anticipated Asset Mix | |
|------------------------|----------|
| Equities | 45% |
| Bonds - Government | 25 |
| - Corporate | 25 |
| Real Estate | <u>5</u> |
| | 100% |

Determination of Economic Assumptions

The rates on the preceding pages should be compared to the current assumptions: 4.75% real rate of return and 3.75% rate of inflation. It is difficult to accurately predict inflation. Inflation's short-term volatility is illustrated by comparing its average rate over the last 10, 30 and 50 years. Although the 10-year average of 2.7% is lower than the System's assumed rate of 3.75%, the longer 30 and 50-year averages of 4.1% are both higher than the System's rate. However, it should be noted that both the 30 and 50-year averages are influenced by the large annual increases from 1973 to 1982 (annually averaged 9.2% during the period). The validity of the System's assumption is dependent upon the emphasis one assigns to the short and long-term histories as well as economists' predictions for future years. In keeping with current practice that emphasizes results over the long term and economists' views of future inflation rates, we recommend that the System decrease its current 3.75% assumption to 3.50%.

The real rate of return shows similar, although more exaggerated, behavior to the inflation rate. The System's very recent experience would suggest that the current 4.75% assumption might be too high, while its longer-term results suggest that it may be too low. As discussed in the inflation section, current practice requires a longer outlook that limits the significance of recent low returns. However, the experience of the latter half of the 1990s is considered by many financial experts as unusually high and should not overly influence the assumed long-term rate either. Additionally, over the last few years some investment experts have been predicting a continuation of lower returns in the short-term, especially given the Fund's fairly conservative asset mix of equities and bonds. The combination of these factors leads us to recommend a decrease from 4.75% to 4.50%.

The net result of the two recommendations is that the current overall interest rate of 8.50% be reduced to 8.00%.

A review of the Fund's assumed wage inflation was also included in this study. The wage inflation assumption is the inflationary component of the salary scale assumption and the assumed rate at which overall payroll will grow each year. The Fund's current assumption for wage inflation is 3.75%. The historical wage inflation rates in the table on the previous page show 3.75% to be on the lower side, but a reasonable assumption based on national averages. Generally, wage inflation has slightly exceeded price inflation due to productivity gains in the active workforce. As a result, we recommend no change in the current wage inflation assumption of 3.75%. The difference between this rate and the price inflation rate of 3.50% is 0.25%, which is the portion due to productivity gains.

As additional support for the Fund's current economic assumptions, below are the results of a comparative study of 72 of the major public employee retirement systems released by the Wisconsin Legislative Council in December 2007. We have included SBF's relevant rates for comparison purposes. As can be seen, SBF's assumptions are in line with those of other major systems.

| <u>Assumption</u> | <u>High</u> | <u>Low</u> | <u>Average</u> | <u>Most Common</u> | <u>SBF - Current</u> | <u>SBF - Proposed</u> |
|-------------------|-------------|------------|----------------|------------------------|--------------------------|---------------------------|
| Interest Rate | 9.00% | 7.25% | 7.99% | 8.00% | 8.50% | 8.00% |
| Wage Inflation | 6.00% | 2.50% | 3.78% | 4.00% | 3.75% | 3.75% |

Only hindsight will tell whether a particular combination of economic assumptions is optimal. We believe the recommended assumptions are the best combination for the SBF at the current time.

**CONNECTICUT POLICEMEN AND FIREMEN
SURVIVORS' BENEFIT FUND
PROPOSED RATES SEPARATION FROM ACTIVE SERVICE
FOR SERVICE RETIREMENT**

| Age | Proposed Rate | Current Rate |
|------------|----------------------|---------------------|
| 45 | 0.25000 | 0.05000 |
| 46 | 0.25000 | 0.05000 |
| 47 | 0.25000 | 0.05000 |
| 48 | 0.25000 | 0.07500 |
| 49 | 0.25000 | 0.07500 |
| 50 | 0.20000 | 0.10000 |
| 51 | 0.16000 | 0.10000 |
| 52 | 0.14000 | 0.10000 |
| 53 | 0.12000 | 0.10000 |
| 54 | 0.12000 | 0.12000 |
| 55 | 0.12000 | 0.12000 |
| 56 | 0.12000 | 0.12000 |
| 57 | 0.12000 | 0.12000 |
| 58 | 0.12000 | 0.12000 |
| 59 | 0.16000 | 0.16000 |
| 60 | 0.20000 | 0.20000 |
| 61 | 0.20000 | 0.20000 |
| 62 | 0.20000 | 0.20000 |
| 63 | 0.25000 | 0.25000 |
| 64 | 0.25000 | 0.25000 |
| 65 | 1.00000 | 1.00000 |

**CONNECTICUT POLICEMEN AND FIREMEN
SURVIVORS' BENEFIT FUND
CURRENT RATES SEPARATION FROM ACTIVE SERVICE
FOR WITHDRAWAL**

| Age | Proposed Rate | Current Rate |
|------------|----------------------|---------------------|
| 19 | 0.07000 | 0.07000 |
| 20 | 0.07000 | 0.07000 |
| 21 | 0.07000 | 0.07000 |
| 22 | 0.07000 | 0.07000 |
| 23 | 0.07000 | 0.07000 |
| 24 | 0.07000 | 0.07000 |
| 25 | 0.07000 | 0.07000 |
| 26 | 0.07000 | 0.07000 |
| 27 | 0.07000 | 0.07000 |
| 28 | 0.07000 | 0.05000 |
| 29 | 0.07000 | 0.04000 |
| 30 | 0.05000 | 0.02500 |
| 31 | 0.05000 | 0.02500 |
| 32 | 0.05000 | 0.02000 |
| 33 | 0.04000 | 0.01000 |
| 34 | 0.04000 | 0.01000 |
| 35 | 0.04000 | 0.01000 |
| 36 | 0.03000 | 0.01000 |
| 37 | 0.03000 | 0.01000 |
| 38 | 0.02000 | 0.01000 |
| 39 | 0.02000 | 0.01000 |
| 40 | 0.02000 | 0.01000 |
| 41 | 0.02000 | 0.01000 |
| 42 | 0.02000 | 0.01000 |
| 43 | 0.02000 | 0.01000 |
| 44 | 0.02000 | 0.01000 |
| 45 | 0.01000 | 0.00000 |
| 46 | 0.01000 | 0.00000 |
| 47 | 0.01000 | 0.00000 |
| 48 | 0.01000 | 0.00000 |
| 49 | 0.01000 | 0.00000 |
| 50 | 0.00000 | 0.00000 |

**CONNECTICUT POLICEMEN AND FIREMEN
SURVIVORS' BENEFIT FUND
CURRENT RATES SEPARATION FROM ACTIVE SERVICE
FOR DEATH**

| Age | Rate |
|-----|---------|
| 19 | 0.00006 |
| 20 | 0.00006 |
| 21 | 0.00006 |
| 22 | 0.00007 |
| 23 | 0.00008 |
| 24 | 0.00008 |
| 25 | 0.00008 |
| 26 | 0.00009 |
| 27 | 0.00009 |
| 28 | 0.00010 |
| 29 | 0.00011 |
| 30 | 0.00011 |
| 31 | 0.00012 |
| 32 | 0.00013 |
| 33 | 0.00014 |
| 34 | 0.00015 |
| 35 | 0.00015 |
| 36 | 0.00017 |
| 37 | 0.00018 |
| 38 | 0.00020 |
| 39 | 0.00021 |
| 40 | 0.00023 |
| 41 | 0.00023 |
| 42 | 0.00026 |
| 43 | 0.00028 |
| 44 | 0.00031 |
| 45 | 0.00032 |
| 46 | 0.00035 |
| 47 | 0.00039 |
| 48 | 0.00042 |
| 49 | 0.00045 |
| 50 | 0.00050 |
| 51 | 0.00054 |
| 52 | 0.00059 |
| 53 | 0.00064 |
| 54 | 0.00070 |
| 55 | 0.00077 |
| 56 | 0.00085 |
| 57 | 0.00094 |
| 58 | 0.00101 |
| 59 | 0.00112 |
| 60 | 0.00122 |
| 61 | 0.00137 |
| 62 | 0.00149 |
| 63 | 0.00164 |
| 64 | 0.00183 |

It is recommended that the current rates be continued.

**CONNECTICUT POLICEMEN AND FIREMEN
SURVIVORS' BENEFIT FUND
CURRENT RATES SEPARATION FROM ACTIVE SERVICE
FOR DISABILITY**

| Age | Proposed Rate | Current Rate |
|------------|----------------------|---------------------|
| 19 | 0.00110 | 0.00000 |
| 20 | 0.00110 | 0.00000 |
| 21 | 0.00110 | 0.00000 |
| 22 | 0.00110 | 0.00000 |
| 23 | 0.00134 | 0.00000 |
| 24 | 0.00140 | 0.00000 |
| 25 | 0.00142 | 0.00000 |
| 26 | 0.00143 | 0.00000 |
| 27 | 0.00144 | 0.00000 |
| 28 | 0.00145 | 0.00000 |
| 29 | 0.00147 | 0.00000 |
| 30 | 0.00149 | 0.00000 |
| 31 | 0.00161 | 0.00000 |
| 32 | 0.00174 | 0.00000 |
| 33 | 0.00189 | 0.00000 |
| 34 | 0.00204 | 0.00000 |
| 35 | 0.00220 | 0.00000 |
| 36 | 0.00237 | 0.00000 |
| 37 | 0.00255 | 0.00000 |
| 38 | 0.00273 | 0.00000 |
| 39 | 0.00294 | 0.00000 |
| 40 | 0.00318 | 0.00000 |
| 41 | 0.00345 | 0.00000 |
| 42 | 0.00375 | 0.00000 |
| 43 | 0.00408 | 0.00000 |
| 44 | 0.00446 | 0.00000 |
| 45 | 0.00488 | 0.00000 |
| 46 | 0.00535 | 0.00000 |
| 47 | 0.00588 | 0.00000 |
| 48 | 0.00646 | 0.00000 |
| 49 | 0.00855 | 0.00000 |
| 50 | 0.01105 | 0.00000 |
| 51 | 0.01577 | 0.00000 |
| 52 | 0.01758 | 0.00000 |
| 53 | 0.02186 | 0.00000 |
| 54 | 0.02451 | 0.00000 |
| 55 | 0.03029 | 0.00000 |
| 56 | 0.03712 | 0.00000 |
| 57 | 0.04503 | 0.00000 |
| 58 | 0.05393 | 0.00000 |
| 59 | 0.06359 | 0.00000 |
| 60 | 0.06884 | 0.00000 |
| 61 | 0.07275 | 0.00000 |
| 62 | 0.07424 | 0.00000 |
| 63 | 0.07574 | 0.00000 |
| 64 | 0.07724 | 0.00000 |
| 65 | 0.00000 | 0.00000 |

**CONNECTICUT POLICEMEN AND FIREMEN
SURVIVORS' BENEFIT FUND
PROPOSED RATES SALARY INCREASE**

| Age | Proposed Rate | Current Rate |
|------------|----------------------|---------------------|
| 19 | 0.11250 | 0.07250 |
| 20 | 0.11250 | 0.07250 |
| 21 | 0.11250 | 0.07250 |
| 22 | 0.11250 | 0.07250 |
| 23 | 0.11250 | 0.07250 |
| 24 | 0.11250 | 0.07250 |
| 25 | 0.11250 | 0.07250 |
| 26 | 0.10450 | 0.07250 |
| 27 | 0.09650 | 0.07250 |
| 28 | 0.08850 | 0.07110 |
| 29 | 0.08050 | 0.06970 |
| 30 | 0.07250 | 0.06830 |
| 31 | 0.07050 | 0.06690 |
| 32 | 0.06850 | 0.06550 |
| 33 | 0.06650 | 0.06410 |
| 34 | 0.06450 | 0.06270 |
| 35 | 0.06250 | 0.06130 |
| 36 | 0.06050 | 0.05990 |
| 37 | 0.05850 | 0.05850 |
| 38 | 0.05650 | 0.05650 |
| 39 | 0.05450 | 0.05450 |
| 40 | 0.05250 | 0.05250 |
| 41 | 0.05150 | 0.05150 |
| 42 | 0.05050 | 0.05050 |
| 43 | 0.04950 | 0.04950 |
| 44 | 0.04850 | 0.04850 |
| 45 | 0.04750 | 0.04750 |
| 46 | 0.04700 | 0.04700 |
| 47 | 0.04650 | 0.04650 |
| 48 | 0.04600 | 0.04600 |
| 49 | 0.04550 | 0.04550 |
| 50-64 | 0.04500 | 0.04500 |

**CONNECTICUT POLICEMEN AND FIREMEN
SURVIVORS' BENEFIT FUND
PROPOSED RATES OF POST-RETIREMENT MORTALITY
FOR SERVICE RETIREES**

| Age | Male Service Retirees | | Female Service Retirees | | Age | Male Service Retirees | | Female Service Retirees | |
|-----|-----------------------|--------------|-------------------------|--------------|-----|-----------------------|--------------|-------------------------|--------------|
| | Proposed Rate | Current Rate | Proposed Rate | Current Rate | | Proposed Rate | Current Rate | Proposed Rate | Current Rate |
| 19 | 0.00034 | 0.00044 | 0.00019 | 0.00015 | 60 | 0.00768 | 0.01150 | 0.00444 | 0.00310 |
| 20 | 0.00036 | 0.00046 | 0.00019 | 0.00016 | 61 | 0.00876 | 0.01247 | 0.00506 | 0.00344 |
| 21 | 0.00037 | 0.00047 | 0.00019 | 0.00017 | 62 | 0.01001 | 0.01357 | 0.00581 | 0.00382 |
| 22 | 0.00037 | 0.00049 | 0.00019 | 0.00018 | 63 | 0.01128 | 0.01484 | 0.00666 | 0.00424 |
| 23 | 0.00038 | 0.00051 | 0.00019 | 0.00019 | 64 | 0.01274 | 0.01632 | 0.00765 | 0.00470 |
| 24 | 0.00038 | 0.00054 | 0.00020 | 0.00020 | 65 | 0.01441 | 0.01806 | 0.00862 | 0.00521 |
| 25 | 0.00038 | 0.00056 | 0.00020 | 0.00021 | 66 | 0.01608 | 0.02011 | 0.00971 | 0.00577 |
| 26 | 0.00038 | 0.00059 | 0.00021 | 0.00023 | 67 | 0.01787 | 0.02227 | 0.01095 | 0.00639 |
| 27 | 0.00039 | 0.00062 | 0.00021 | 0.00024 | 68 | 0.01980 | 0.02439 | 0.01216 | 0.00706 |
| 28 | 0.00041 | 0.00065 | 0.00022 | 0.00025 | 69 | 0.02221 | 0.02658 | 0.01345 | 0.00782 |
| 29 | 0.00044 | 0.00069 | 0.00024 | 0.00027 | 70 | 0.02457 | 0.02906 | 0.01486 | 0.00868 |
| 30 | 0.00050 | 0.00073 | 0.00025 | 0.00028 | 71 | 0.02728 | 0.03232 | 0.01674 | 0.00970 |
| 31 | 0.00056 | 0.00078 | 0.00026 | 0.00030 | 72 | 0.03039 | 0.03597 | 0.01858 | 0.01092 |
| 32 | 0.00063 | 0.00083 | 0.00031 | 0.00032 | 73 | 0.03390 | 0.03994 | 0.02066 | 0.01239 |
| 33 | 0.00070 | 0.00089 | 0.00035 | 0.00034 | 74 | 0.03783 | 0.04430 | 0.02297 | 0.01413 |
| 34 | 0.00077 | 0.00095 | 0.00039 | 0.00036 | 75 | 0.04217 | 0.04905 | 0.02546 | 0.01616 |
| 35 | 0.00084 | 0.00102 | 0.00043 | 0.00039 | 76 | 0.04691 | 0.05457 | 0.02811 | 0.01848 |
| 36 | 0.00090 | 0.00109 | 0.00047 | 0.00041 | 77 | 0.05212 | 0.06097 | 0.03097 | 0.02109 |
| 37 | 0.00096 | 0.00117 | 0.00051 | 0.00044 | 78 | 0.05793 | 0.06819 | 0.03411 | 0.02399 |
| 38 | 0.00102 | 0.00126 | 0.00055 | 0.00048 | 79 | 0.06437 | 0.07622 | 0.03759 | 0.02718 |
| 39 | 0.00108 | 0.00137 | 0.00060 | 0.00050 | 80 | 0.07204 | 0.08490 | 0.04151 | 0.03067 |
| 40 | 0.00114 | 0.00148 | 0.00065 | 0.00054 | 81 | 0.08049 | 0.09409 | 0.04588 | 0.03446 |
| 41 | 0.00121 | 0.00162 | 0.00071 | 0.00057 | 82 | 0.08972 | 0.10377 | 0.05078 | 0.03855 |
| 42 | 0.00130 | 0.00181 | 0.00077 | 0.00062 | 83 | 0.09978 | 0.11390 | 0.05629 | 0.04295 |
| 43 | 0.00140 | 0.00205 | 0.00085 | 0.00067 | 84 | 0.11076 | 0.12450 | 0.06251 | 0.04765 |
| 44 | 0.00151 | 0.00233 | 0.00094 | 0.00072 | 85 | 0.12280 | 0.13554 | 0.06952 | 0.05269 |
| 45 | 0.00162 | 0.00265 | 0.00103 | 0.00077 | 86 | 0.13604 | 0.14710 | 0.07745 | 0.05807 |
| 46 | 0.00173 | 0.00301 | 0.00112 | 0.00084 | 87 | 0.15059 | 0.15928 | 0.08638 | 0.06381 |
| 47 | 0.00186 | 0.00340 | 0.00122 | 0.00092 | 88 | 0.16642 | 0.17218 | 0.09634 | 0.06992 |
| 48 | 0.00200 | 0.00383 | 0.00133 | 0.00101 | 89 | 0.18341 | 0.18592 | 0.10730 | 0.07657 |
| 49 | 0.00214 | 0.00429 | 0.00143 | 0.00112 | 90 | 0.19977 | 0.20059 | 0.11915 | 0.08387 |
| 50 | 0.00245 | 0.00479 | 0.00155 | 0.00124 | 91 | 0.21661 | 0.21255 | 0.13168 | 0.09193 |
| 51 | 0.00267 | 0.00531 | 0.00168 | 0.00137 | 92 | 0.23366 | 0.22516 | 0.14460 | 0.10135 |
| 52 | 0.00292 | 0.00587 | 0.00185 | 0.00151 | 93 | 0.25069 | 0.23852 | 0.15762 | 0.11175 |
| 53 | 0.00320 | 0.00646 | 0.00202 | 0.00165 | 94 | 0.26749 | 0.25276 | 0.17043 | 0.12308 |
| 54 | 0.00362 | 0.00707 | 0.00221 | 0.00179 | 95 | 0.28391 | 0.26803 | 0.18280 | 0.13563 |
| 55 | 0.00420 | 0.00772 | 0.00242 | 0.00195 | 96 | 0.29985 | 0.28446 | 0.19451 | 0.14958 |
| 56 | 0.00469 | 0.00839 | 0.00272 | 0.00212 | 97 | 0.31530 | 0.30222 | 0.20538 | 0.16510 |
| 57 | 0.00527 | 0.00909 | 0.00309 | 0.00231 | 98 | 0.33021 | 0.32151 | 0.21524 | 0.18242 |
| 58 | 0.00595 | 0.00984 | 0.00348 | 0.00254 | 99 | 0.34456 | 0.34253 | 0.22395 | 0.20176 |
| 59 | 0.00675 | 0.01063 | 0.00392 | 0.00280 | 100 | 0.35863 | 0.36546 | 0.23139 | 0.22204 |

**CONNECTICUT POLICEMEN AND FIREMEN
SURVIVORS' BENEFIT FUND
PROPOSED RATES OF POST-RETIREMENT MORTALITY
FOR DISABILITY RETIREES**

| Age | Male Disability Retirees | | Female Disability Retirees | | Age | Male Disability Retirees | | Female Disability Retirees | |
|-----|--------------------------|--------------|----------------------------|--------------|-----|--------------------------|--------------|----------------------------|--------------|
| | Proposed Rate | Current Rate | Proposed Rate | Current Rate | | Proposed Rate | Current Rate | Proposed Rate | Current Rate |
| 19 | 0.00038 | 0.00044 | 0.00019 | 0.00038 | 60 | 0.01274 | 0.01150 | 0.00581 | 0.00772 |
| 20 | 0.00038 | 0.00046 | 0.00019 | 0.00039 | 61 | 0.01441 | 0.01247 | 0.00666 | 0.00839 |
| 21 | 0.00038 | 0.00047 | 0.00019 | 0.00040 | 62 | 0.01608 | 0.01357 | 0.00765 | 0.00909 |
| 22 | 0.00038 | 0.00049 | 0.00020 | 0.00041 | 63 | 0.01787 | 0.01484 | 0.00862 | 0.00984 |
| 23 | 0.00039 | 0.00051 | 0.00020 | 0.00043 | 64 | 0.01980 | 0.01632 | 0.00971 | 0.01063 |
| 24 | 0.00041 | 0.00054 | 0.00021 | 0.00044 | 65 | 0.02221 | 0.01806 | 0.01095 | 0.01150 |
| 25 | 0.00044 | 0.00056 | 0.00021 | 0.00046 | 66 | 0.02457 | 0.02011 | 0.01216 | 0.01247 |
| 26 | 0.00050 | 0.00059 | 0.00022 | 0.00047 | 67 | 0.02728 | 0.02227 | 0.01345 | 0.01357 |
| 27 | 0.00056 | 0.00062 | 0.00024 | 0.00049 | 68 | 0.03039 | 0.02439 | 0.01486 | 0.01484 |
| 28 | 0.00063 | 0.00065 | 0.00025 | 0.00051 | 69 | 0.03390 | 0.02658 | 0.01674 | 0.01632 |
| 29 | 0.00070 | 0.00069 | 0.00026 | 0.00054 | 70 | 0.03783 | 0.02906 | 0.01858 | 0.01806 |
| 30 | 0.00077 | 0.00073 | 0.00031 | 0.00056 | 71 | 0.04217 | 0.03232 | 0.02066 | 0.02011 |
| 31 | 0.00084 | 0.00078 | 0.00035 | 0.00059 | 72 | 0.04691 | 0.03597 | 0.02297 | 0.02227 |
| 32 | 0.00090 | 0.00083 | 0.00039 | 0.00062 | 73 | 0.05212 | 0.03994 | 0.02546 | 0.02439 |
| 33 | 0.00096 | 0.00089 | 0.00043 | 0.00065 | 74 | 0.05793 | 0.04430 | 0.02811 | 0.02658 |
| 34 | 0.00102 | 0.00095 | 0.00047 | 0.00069 | 75 | 0.06437 | 0.04905 | 0.03097 | 0.02906 |
| 35 | 0.00108 | 0.00102 | 0.00051 | 0.00073 | 76 | 0.07204 | 0.05457 | 0.03411 | 0.03232 |
| 36 | 0.00114 | 0.00109 | 0.00055 | 0.00078 | 77 | 0.08049 | 0.06097 | 0.03759 | 0.03597 |
| 37 | 0.00121 | 0.00117 | 0.00060 | 0.00083 | 78 | 0.08972 | 0.06819 | 0.04151 | 0.03994 |
| 38 | 0.00130 | 0.00126 | 0.00065 | 0.00089 | 79 | 0.09978 | 0.07622 | 0.04588 | 0.04430 |
| 39 | 0.00140 | 0.00137 | 0.00071 | 0.00095 | 80 | 0.11076 | 0.08490 | 0.05078 | 0.04905 |
| 40 | 0.00151 | 0.00148 | 0.00077 | 0.00102 | 81 | 0.12280 | 0.09409 | 0.05629 | 0.05457 |
| 41 | 0.00162 | 0.00162 | 0.00085 | 0.00109 | 82 | 0.13604 | 0.10377 | 0.06251 | 0.06097 |
| 42 | 0.00173 | 0.00181 | 0.00094 | 0.00117 | 83 | 0.15059 | 0.11390 | 0.06952 | 0.06819 |
| 43 | 0.00186 | 0.00205 | 0.00103 | 0.00126 | 84 | 0.16642 | 0.12450 | 0.07745 | 0.07622 |
| 44 | 0.00200 | 0.00233 | 0.00112 | 0.00137 | 85 | 0.18341 | 0.13554 | 0.08638 | 0.08490 |
| 45 | 0.00214 | 0.00265 | 0.00122 | 0.00148 | 86 | 0.19977 | 0.14710 | 0.09634 | 0.09409 |
| 46 | 0.00245 | 0.00301 | 0.00133 | 0.00162 | 87 | 0.21661 | 0.15928 | 0.10730 | 0.10377 |
| 47 | 0.00267 | 0.00340 | 0.00143 | 0.00181 | 88 | 0.23366 | 0.17218 | 0.11915 | 0.11390 |
| 48 | 0.00292 | 0.00383 | 0.00155 | 0.00205 | 89 | 0.25069 | 0.18592 | 0.13168 | 0.12450 |
| 49 | 0.00320 | 0.00429 | 0.00168 | 0.00233 | 90 | 0.26749 | 0.20059 | 0.14460 | 0.13554 |
| 50 | 0.00362 | 0.00479 | 0.00185 | 0.00265 | 91 | 0.28391 | 0.21255 | 0.15762 | 0.14710 |
| 51 | 0.00420 | 0.00531 | 0.00202 | 0.00301 | 92 | 0.29985 | 0.22516 | 0.17043 | 0.15928 |
| 52 | 0.00469 | 0.00587 | 0.00221 | 0.00340 | 93 | 0.31530 | 0.23852 | 0.18280 | 0.17218 |
| 53 | 0.00527 | 0.00646 | 0.00242 | 0.00383 | 94 | 0.33021 | 0.25276 | 0.19451 | 0.18592 |
| 54 | 0.00595 | 0.00707 | 0.00272 | 0.00429 | 95 | 0.34456 | 0.26803 | 0.20538 | 0.20059 |
| 55 | 0.00675 | 0.00772 | 0.00309 | 0.00479 | 96 | 0.35863 | 0.28446 | 0.21524 | 0.21255 |
| 56 | 0.00768 | 0.00839 | 0.00348 | 0.00531 | 97 | 0.37169 | 0.30222 | 0.22395 | 0.22516 |
| 57 | 0.00876 | 0.00909 | 0.00392 | 0.00587 | 98 | 0.38304 | 0.32151 | 0.23139 | 0.23852 |
| 58 | 0.01001 | 0.00984 | 0.00444 | 0.00646 | 99 | 0.39200 | 0.34253 | 0.23747 | 0.25276 |
| 59 | 0.01128 | 0.01063 | 0.00506 | 0.00707 | 100 | 0.39789 | 0.36546 | 0.24483 | 0.26803 |