



**CONNECTICUT JUDGES, FAMILY SUPPORT  
MAGISTRATES, AND COMPENSATION  
COMMISSIONERS RETIREMENT SYSTEM**

**REPORT OF THE ACTUARY ON THE VALUATION  
PREPARED AS OF JUNE 30, 2012**



# Cavanaugh Macdonald

CONSULTING, LLC

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November 5, 2012

State of Connecticut  
State Employees Retirement Commission  
55 Elm Street  
Hartford, CT 06106

#### Members of the Commission:

Connecticut General Statutes Section 5-155a governs the operation of the Connecticut Judges, Family Support Magistrates, and Compensation Commissioners Retirement System. The actuary makes periodic valuations of the contingent assets and liabilities of the Retirement System at the direction of the Commission. We have submitted the report giving the results of the actuarial valuation of the Retirement System prepared as of June 30, 2012. The report indicates that annual employer contributions at the rate of 53.78% of compensation for the fiscal year ending June 30, 2014 are sufficient to support the benefits of the System.

In preparing the valuation, the actuary relied on data provided by the Comptroller's Office. While not verifying data at the source, the actuary performed tests for consistency and reasonableness. This valuation includes changes to the actuarial assumptions as adopted by the Commission as a result of our Experience Investigation report for the Three-Year period ending June 30, 2010. In addition, this valuation includes the plan changes from the 2011 (Public Act 61) and 2012 (Public Act 01) legislation that was passed for the Retirement System.

The System is funded on an actuarial reserve basis. The actuarial assumptions recommended by the actuary and adopted by the Commission are in the aggregate reasonably related to the experience under the System and to reasonable expectations of anticipated experience under the System. The assumptions and methods used for funding purposes meet the parameters set for the disclosures presented in the financial section by Governmental Accounting Standards Board (GASB) Statement Nos. 25 and 27. The funding objective of the plan is that contribution rates over time will remain level as a percent of payroll. The valuation method used is the projected unit credit method. Gains and losses are reflected in the unfunded accrued liability which is being amortized as a level percent of payroll within a 19-year period. This period is based on the funding policy of SERS that amortizes the unfunded accrued liability over a declining period of years, starting with 40 years as of July 1, 1991.

This is to certify that the valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the retirement system and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the System.

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November 5, 2012  
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Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

The undersigned meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Sincerely yours,

A handwritten signature in black ink, appearing to read 'Thomas J. Cavanaugh'.

Thomas J. Cavanaugh, FSA, FCA, MAAA, EA  
Chief Executive Officer

A handwritten signature in black ink, appearing to read 'John J. Garrett'.

John J. Garrett, ASA, FCA, MAAA  
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read 'Edward J. Koebel'.

Edward J. Koebel, FCA, MAAA, EA  
Principal and Consulting Actuary

TJC/KC



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**CONNECTICUT JUDGES, FAMILY SUPPORT MAGISTRATES, AND  
COMPENSATION COMMISSIONERS RETIREMENT SYSTEM  
REPORT OF THE ACTUARY  
ON THE VALUATION  
PREPARED AS OF JUNE 30, 2012**

**SECTION I - SUMMARY OF PRINCIPAL RESULTS**

1. For convenience of reference, the principal results of the current and preceding valuations are summarized below:

<b>Valuation Date</b>	<b>June 30, 2012</b>	<b>June 30, 2010</b>
Active members:		
Number	204	212
Annual compensation	\$30,308,176	\$31,601,530
Retired members and beneficiaries:		
Number	239	230
Annual allowances	\$20,519,302	\$19,030,761
Deferred Vested Members:		
Number	2	2
Annual allowances	\$104,325	\$104,325
Assets:		
Market Value	\$156,916,632	\$149,783,272
Actuarial Value	\$174,672,426	\$179,739,926
Unfunded actuarial accrued liability	\$144,847,720	\$97,107,583
Amortization period (years)	19	21
Funded Ratio	54.7%	64.9%
<b>For Fiscal Year Ending</b>	<b>June 30, 2014</b>	<b>June 30, 2012</b>
Annual Required Employer Contribution (ARC):		
Normal	\$6,094,016	8,886,416
Accrued liability	<u>\$10,204,472</u>	<u>6,209,073</u>
Total	\$16,298,488	\$15,095,489
Annual Required Employer Contribution Rates (ARC):		
Normal	20.11%	28.12%
Accrued liability	<u>33.67%</u>	<u>19.65%</u>
Total	53.78%	47.77%



- 2. All amounts shown that were developed as a result of valuations prior to June 30, 2010 were developed and/or reported by the prior actuarial firm. The results of the valuation are given in Schedule A.
- 3. Comments on the valuation results are given in Section IV, comments on the experience and actuarial gains and losses during the valuation year are given in Section VII and the rates of contribution payable by employers are given in Section V.
- 4. The following changes to the actuarial assumptions were made to this valuation as a result of the Experience Investigation for the Three-Year period ending June 30, 2010 which was adopted by the Commission on September 20, 2012. The following summarizes the changes:
  - a. The Investment Return assumption was changed from 8.25% to 8.00%.
  - b. The Cost-of-Living Adjustment (COLA) assumptions for the following retirement tiers:

Group	Before Assumption Change	After Assumption Change
Hired prior to January 1, 1981 and retired before October 2, 2011	5.25%	4.75%
Hired on or after January 1, 1981 and retired before October 2, 2011	2.75%	2.60%
Retired on or after October 2, 2011	N/A	2.30%

- c. Demographic changes in the rates of mortality and salary scale were made to better match the experience of the System.
  - d. These assumption changes increased the Annual Required Contribution Rate by 4.80% from last year to this year and resulted in a 2.3% decrease in the funded ratio.
- 5. The following plan provision changes were made since the last valuation:
  - a. For members retiring on or after October 2, 2011, the COLA is set to match the SERS COLA of 60% of the Consumer Price Index (CPI) with a minimum of 2.0% and a maximum of 7.5%. Our assumption for this group is 2.30%.
  - b. All surviving spouses get the SERS COLA effective immediately.



- c. For those active members hired after June 30, 2011, the Final Compensation used in the benefit formula will change from a Final Salary definition to a 5-Year Final Average Salary definition.
  - d. For current members who are eligible to retire after June 30, 2022, the Normal Retirement Eligibility increases from Age 65 or 20 years of eligibility service to Age 63 with 25 years of eligibility service or Age 65 with 10 years of eligibility service or 30 years of eligibility service (with at least 10 years as a judge).
  - e. These plan changes decreased the Annual Required Contribution Rate by 3.04% from last year to this year and resulted in a 1.4% increase in the funded ratio.
6. After discussion with SERS staff, it was learned that Judges can use their SERS service towards retirement to meet the service retirement requirement provided that, if they were in a SERS contributory plan, such contributions were transferred to the Judges Retirement Fund or, if the contributions had been refunded, such contributions were repaid with interest to the Judges Retirement Fund. Our prior programming of the Retirement System benefits was updated to reflect this fact.
7. Schedule B of this report presents the development of the actuarial value of assets. Schedule D details the actuarial assumptions and methods employed. Schedule F gives a summary of the benefit and contribution provisions of the plan.
8. The table on the following page provides a history of some pertinent figures.



**Connecticut Judges, Family Support Magistrates, and Compensation Commissioners Retirement System**

**Comparative Schedule\***

Valuation Date June 30	Active Members			Retired Lives			Valuation Results (\$ thousands)				
	Number	Payroll (\$ thousands)	Average Salary (\$ thousands)	% increase from previous year	Number	Active/ Retired Ratio	Annual Benefits (\$ thousands)	Benefits as % of Payroll	Accrued Liability	Valuation Assets	UAAL
2005	217	\$30,149	\$138.9	5.8%	217	1.000	\$15,456	51.3%	\$235,007	\$160,322	\$74,685
2006	217	31,803	146.6	5.5	220	0.986	16,430	51.7	246,871	169,666	77,205
2007	218	33,757	154.8	5.6	218	1.000	16,965	50.3	261,215	182,392	78,823
2008	220	33,982	154.5	(0.2)	225	0.978	17,790	52.4	267,016	191,719	75,297
2010	212	31,602	149.1	(3.5)	230	0.922	19,031	60.2	276,848	179,740	97,108
2012	204	30,308	148.6	(0.3)	239	0.854	20,519	67.7	319,520	174,672	144,848

\*All amounts prior to 2010 reported by prior actuarial firm.





**SECTION II - MEMBERSHIP**

Data regarding the membership of the System for use as a basis for the valuation were furnished by the Comptroller's office. The following tables summarize the membership of the Retirement System as of June 30, 2012 upon which the valuation was based. Detailed tabulations of the data are given in Schedule G.

**Active Members**

Group	Number	Payroll	Group Averages			
			Salary	Age*	Benefit Service*	Eligibility Service*
Judges	182	\$27,420,913	\$150,664	58.7	11.4	20.5
Compensation Commissioners	15	\$2,224,425	\$148,295	54.5	8.9	17.3
Family Support Magistrates	7	\$662,838	\$94,691	56.1	7.6	14.3
<b>Total</b>	<b>204</b>	<b>\$30,308,176</b>	<b>\$148,569</b>	<b>58.3</b>	<b>11.1</b>	<b>20.0</b>

\*Years

Of the 204 active members, 161 are vested and 43 are non-vested.

**Retired Lives**

Type of Benefit Payment	No.	Annual Benefits	Group Averages	
			Benefit	Age*
Retirement	158	\$16,439,945	\$104,050	77.9
Survivor	81	\$4,079,357	\$50,362	80.5
<b>Total</b>	<b>239</b>	<b>\$20,519,302</b>	<b>\$85,855</b>	<b>78.8</b>

\*Years

This valuation also includes 2 deferred vested members with estimated annual benefits of \$104,325.



### **SECTION III - ASSETS**

1. As of June 30, 2012, the total market value of assets amounted to \$156,916,632 as reported by the Comptroller's Office. The actuarial value of assets used for the current valuation was \$174,672,426. Schedule B shows the development of the actuarial value of assets as of June 30, 2012.
2. Schedule C shows receipts and disbursements of the System for the two years preceding the valuation date and a reconciliation of the fund balances at market value.

### **SECTION IV – COMMENTS ON VALUATION**

1. Schedule A of this report outlines the results of the valuation of the Retirement System as of June 30, 2012. The valuation was prepared in accordance with the actuarial assumptions and methods set forth in Schedule D and the actuarial cost method which is described in Schedule E.
2. The valuation shows that the System has a total actuarial accrued liability of \$319,520,146, of which \$193,431,378 is for the benefits payable on account of present retired members, beneficiaries of deceased members, and inactive members entitled to deferred vested benefits, and \$126,088,768 is for the benefits expected to be payable on account of present active members, based on service to the valuation date. Against these liabilities, the System has total present assets for valuation purposes of \$174,672,426 as of June 30, 2012. When this amount is deducted from the actuarial accrued liability of \$319,520,146, there remains \$144,847,720 as the unfunded actuarial accrued liability.



3. The employer's contributions to the System consist of normal cost contributions and accrued liability contributions. The normal cost represents the ultimate cost of the benefits and the accrued liability contribution is an addition (reduction in case of a surplus) due to the amortization of the unfunded accrued liability. The valuation indicates that annual employer normal contributions at the rate of 20.11% of active members' compensation are required to provide the currently accruing benefits of the System.
4. Accrued liability contributions of 33.67% of payroll are required to be made to amortize the unfunded accrued liability within 19 years from the valuation date.

#### **SECTION V – CONTRIBUTIONS PAYABLE BY EMPLOYER**

The following table shows the amount and rate of contribution payable by the employer as determined from the present valuation for the 2013/2014 fiscal year.

Contribution for	Contribution Amount	Contribution Rate
Normal Cost:		
Service retirement benefits	\$6,902,995	22.78%
Disability benefits	483,207	1.59
Survivor benefits	<u>223,223</u>	<u>0.74</u>
Total	\$7,609,425	25.11%
Less Member Contributions:	\$1,515,409	5.00%
Employer Normal Cost	\$6,094,016	20.11%
Unfunded Actuarial Accrued Liabilities (19 year level percent of payroll amortization)	\$10,204,472	33.67%
Total	\$16,298,488	53.78%



The following table shows the estimated rates of contributions payable by the employer for the fiscal year ending June 30, 2015. These results assume an 8.00% investment return on actuarial value of assets and a 4.75% annual growth in the compensation of active members.

Contribution for	2014/2015	
	As % of Pay	\$
Employer Normal Cost	20.11%	\$6,383,482
Unfunded Actuarial Accrued Liabilities	35.74%	\$11,347,649
Total	55.85%	\$17,731,131



**SECTION VI – ACCOUNTING INFORMATION**

- Governmental Accounting Standards Board Statements 25 and 27 set forth certain items of required supplementary information to be disclosed in the financial statements of the System and the employer. One such item is a distribution of the number of employees by type of membership, as follows:

**NUMBER OF ACTIVE AND RETIRED MEMBERS  
AS OF JUNE 30, 2012**

<b>GROUP</b>	<b>NUMBER</b>
Retirees and beneficiaries currently receiving benefits	239
Terminated employees entitled to benefits but not yet receiving benefits	2
Active plan members	<u>204</u>
<b>Total</b>	<b>445</b>

- Another such item is the schedule of funding progress as shown below.

**SCHEDULE OF FUNDING PROGRESS**  
(Dollar amounts in thousands)

<b>Actuarial Valuation Date</b>	<b>Actuarial Value of Assets (a)</b>	<b>Actuarial Liability (AAL) - PUC (b)</b>	<b>Unfunded AAL (UAAL) (b - a)</b>	<b>Funded Ratio (a / b)</b>	<b>Covered Payroll (c)</b>	<b>UAAL as a Percentage of Covered Payroll ((b - a) / c)</b>
6/30/2005	\$160,322	\$235,007	\$74,685	68.2%	\$30,149	247.7%
6/30/2006	169,666	246,871	77,205	68.7	31,803	242.8
6/30/2007	182,392	261,216	78,823	69.8	33,757	233.5
6/30/2008	191,719	267,016	75,297	71.8	33,982	221.6
6/30/2010	179,740	276,848	97,108	64.9	31,602	307.3
6/30/2012	174,672	319,520	144,848	54.7	30,308	477.9

All figures prior to 6/30/2010 were reported by the prior actuarial firm.



3. The following shows the schedule of employer contributions (all dollar amounts are in thousands).

<u>Fiscal Year Ending June 30</u>	<u>Valuation Date Ending June 30</u>	<u>Annual Required Contribution</u>	<u>Actual Contribution</u>	<u>Percentage Contributed</u>
2010	2008	\$15,399,207	\$0	0%
2011	2008	16,207,665	0	0
2012	2010	15,095,489	15,095,489	100
2013	2010	16,005,904	N/A	N/A
2014	2012	16,298,488	N/A	N/A

All figures before the fiscal year ending 6/30/2010 were reported by the prior actuarial firm.

4. The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2012. Additional information as of the latest actuarial valuation follows.

Valuation date	06/30/2012
Actuarial cost method	Projected Unit Credit
Amortization method	Level percent of payroll, closed
Remaining amortization period	19 years
Asset valuation method	5-year smoothed actuarial value
Actuarial assumptions:	
Investment rate of return	8.00%
Projected salary increases	4.75%
Cost-of-living adjustments	2.30% - 4.75%



### SECTION VII – EXPERIENCE

Actual experience will never (except by coincidence) coincide exactly with assumed experience. It is assumed that gains and losses will be in balance over a period of years, but sizable year to year fluctuations are common. Detail on the derivation of the experience gain/(loss) for the two year period ended June 30, 2012 is shown below.

	<u>\$ Thousands</u>
(1) UAAL* as of June 30, 2010	97,107.6
(2) Normal cost from 2010 valuation	10,466.5
(3) Actual contributions during 2011 fiscal year	1,566.4
(4) Interest accrual: $(1) \times .0825 + [(2) - (3)] \times .0404$	<u>8,371.2</u>
(5) Expected UAAL as of June 30, 2011: $(1) + (2) - (3) + (4)$	114,378.9
(6) Normal cost for 2011 fiscal year	11,016.0
(7) Actual contributions during 2012 fiscal year	16,660.6
(8) Interest accrual: $(5) \times .0825 + [(6) - (7)] \times .0404$	<u>9,208.0</u>
(9) Expected UAAL as of June 30, 2012: $(5) + (6) - (7) + (8)$	117,942.3
(10) Assumption Changes	13,760.0
(11) Plan Changes	<u>(8,658.1)</u>
(12) Expected UAAL as of June 30, 2012: $(9) + (10) + (11)$	123,044.2
(13) Actual UAAL as of June 30, 2012	144,847.7
(14) Gain/(loss): $(12) - (13)$	(21,803.5)
(15) Gain/(loss) as percent of actuarial accrued liabilities as of June 30, 2010 (\$276,847.5)	(7.9)%

\*Unfunded actuarial accrued liability.

Valuation Date June 30	Actuarial Gain/(Loss) as a % of Beginning Accrued Liabilities
2010	(7.1)%
2012	(7.9)%



**SCHEDULE A**  
**RESULTS OF VALUATION**  
**PREPARED AS OF JUNE 30, 2012**

	<b>JUNE 30, 2012</b>
<b>1. ACTUARIAL ACCRUED LIABILITY</b>	
Present value of prospective benefits payable in respect of:	
(a) Present active members	
- Service retirement benefits	\$116,339,903
- Disability retirement benefits	6,656,695
- Death and survivor benefits	<u>3,092,170</u>
- Total	\$126,088,768
(b) Present inactive members and members entitled to deferred vested benefits:	\$1,161,353
(c) Present annuitants and beneficiaries	<u>\$192,270,025</u>
(d) Total actuarial accrued liability [1(a) + 1(b) + 1(c)]	\$319,520,146
<b>2. ACTUARIAL VALUE OF ASSETS</b>	<u>\$174,672,426</u>
<b>3. UNFUNDED ACTUARIAL ACCRUED LIABILITY [1(d) – 2]</b>	\$144,847,720





**SCHEDULE B**

**DEVELOPMENT OF ACTUARIAL VALUE OF ASSETS**

	June 30, 2012	June 30, 2011
(1) Actuarial Value Beginning of Year*	\$176,549,231	\$187,422,611
(2) Market Value End of Year	156,916,632	158,893,704
(3) Market Value Beginning of Year	158,893,704	149,783,272
(4) Cash Flow		
(a) Contributions	16,660,613	1,566,429
(b) Disbursements	<u>(20,313,498)</u>	<u>(19,401,469)</u>
(c) Net: (4)(a) + (4)(b)	(3,652,885)	(17,835,040)
(5) Investment Income		
(a) Market Total: (2) – (3) – (4)(c)	1,675,813	26,945,472
(b) Assumed Rate	8.25%	8.25%
(c) Amount for Immediate Recognition: [(1) x (5)(b)] + [(4)(c) x (5)(b) x 0.490092]	14,417,616	14,741,248
(d) Amount for Phased-In Recognition: (5)(a) – (5)(c)	(12,741,803)	12,204,224
(6) Phased-In Recognition of Investment Income		
(a) Current Year: (5)(d) / 5	(2,548,361)	2,440,845
(b) First Prior Year	2,440,845	602,752
(c) Second Prior Year	602,752	(8,480,931)
(d) Third Prior Year	(8,480,931)	(4,655,841)
(e) Fourth Prior Year	<u>(4,655,841)</u>	<u>2,313,587</u>
(f) Total Recognized Investment Gain	(12,641,536)	(7,779,588)
(7) Preliminary Actuarial Value End of Year: (1) + (4)(c) + (5)(c) + (6)(f)	174,672,426	176,549,231
(8) Final Actuarial Value End of Year Using 20% Corridor: Greater of [(7) and .8 x (2)], but no more than 1.2 x (2)	174,672,426	176,549,231
(9) Difference Between Market & Actuarial Values: (2) – (8)	(17,755,794)	(17,655,527)
(10) Rate of Return on Actuarial Value	1.02%	3.90%

\* Before corridor constraints, if applicable.



**SCHEDULE C**

**SUMMARY OF RECEIPTS AND DISBURSEMENTS  
(Market Value)**

	YEAR ENDING	
	June 30, 2012 (\$1,000's)	June 30, 2011 (\$1,000's)
<u>Receipts for the Year</u>		
Contributions:		
Members	\$ 1,565	\$ 1,566
Employer	15,095	0
Subtotal	\$ 16,660	\$ 1,566
Investment Earnings	1,676	26,946
TOTAL	\$ 18,336	\$ 28,512
<u>Disbursements for the Year</u>		
Benefit Payments	\$ 20,291	\$ 19,390
Refunds to Members	22	0
Administrative Expenses	0	11
TOTAL	\$ 20,313	\$ 19,401
<u>Excess of Receipts over Disbursements</u>	\$ (1,977)	\$ 9,111
<u>Reconciliation of Asset Balances</u>		
Asset Balance as of the Beginning of Year	\$ 158,894	\$ 149,783
Excess of Receipts over Disbursements	(1,977)	9,111
Asset Balance as of the End of Year	\$ 156,917	\$ 158,894
Rate of Return	1.07%	19.13%



**SCHEDULE D**

**OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHODS**

Adopted or reaffirmed by the Commission for the June 30, 2012 and later valuations.

**VALUATION INTEREST RATE:** 8.00% per annum, compounded annually, net of expenses.

**SALARY INCREASES:** 4.75% at all ages.

**COST OF LIVING ADJUSTMENTS:**

Group	Rate
Hired prior to January 1, 1981 and retired prior to October 2, 2011	4.75%
Hired on or after January 1, 1981 and retired prior to October 2, 2011	2.60%
Retired on or after October 2, 2011	2.30%
All surviving spouses of active or retired members	2.30%

**PAYROLL GROWTH ASSUMPTION:** 4.75% per annum.

**SEPARATIONS BEFORE SERVICE RETIREMENT:** Representative values of the assumed annual rates of separation before service retirement are as follows:

WITHDRAWAL: None.

DISABILITY: 30% of 1975 Social Security Table

**RETIREMENT:** 50% are assumed to retire at later of age 65 and 10 years of service. The remaining actives are assumed to retire at age 70.

**DEATHS AFTER RETIREMENT:** The RP2000 Mortality Table for Annuitants and Non-Annuitants projected with Scale AA 15 years for men (set back 2 years) and 25 years for women (set back 1 year) is used for the period after retirement and for dependent beneficiaries. Representative values of the assumed annual rates of mortality are as follows:

Age	Men	Women	Age	Men	Women
40	.086%	.044%	65	0.810%	0.760%
45	.107	.069	70	1.425	1.311
50	.142	.101	75	2.460	2.083
55	.219	.198	80	4.483	3.482
60	.414	.392	85	8.075	5.981

In our opinion, the projection of the mortality rates with Scale AA continues to provide a sufficient margin in the assumed rates of mortality to allow for additional improvement in mortality experience.

55% (men) and 80% (women) of the RP-2000 Disability Mortality Table is used for the period after disability.



**ASSET METHOD:** Actuarial Value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected value of assets, based on the assumed valuation rate of return. The amount recognized each year is 1/5 of the difference between market value and expected actuarial value. In addition, the actuarial value of assets cannot be less than 80% or more than 120% of the market value of assets.

**VALUATION METHOD:** Projected Unit Credit cost method. See Schedule E for a brief description of this method.

**SPOUSES:** For members who have elected spouse coverage, husbands are assumed to be three years older than their wives.

**PERCENT MARRIED:** 80% of active members are assumed to be married.



## SCHEDULE E

### **ACTUARIAL COST METHOD**

The valuation is prepared on a projected benefit basis, under which the present value, at the interest rate assumed to be earned in the future (currently 8.00%), of each member's expected benefits at retirement or death is determined, based on age, service and sex. The calculations take into account the probability of a member's death or termination of employment prior to becoming eligible for a benefit, as well as the possibility of his terminating with a service, disability or survivor's benefit. Future salary increases are also anticipated. The present value of the expected benefits payable on account of the active members is added to the present value of the expected future payments to retired members, beneficiaries and members entitled to deferred vested benefits to obtain the present value of all expected benefits payable from the System on account of the present group of members and beneficiaries.

The Projected Unit Credit cost method is used to develop employer contributions. The employer contributions required to support the benefits of the System consist of a normal contribution and an unfunded actuarial accrued liability contribution.

The Actuarial Accrued Liability is determined as the present value of benefits accrued to the valuation date, where the accrued benefit for each active member is the pro-rata portion (based on service to the valuation date) of the projected benefit payable at termination, death, disability or retirement. The Actuarial Accrued Liability for deferred vested and inactive members is the present value as of the valuation date of their remaining benefit payments.

The normal contribution is determined as the present value of the portion of the projected benefit attributable to the year following the valuation date.

The Unfunded Actuarial Accrued Liability is determined by subtracting the Actuarial Value of Assets from the Actuarial Accrued Liability.



**SCHEDULE F**

**SUMMARY OF MAIN SYSTEM PROVISIONS  
AS INTERPRETED FOR VALUATION PURPOSES**

The Connecticut Judges, Family Support Magistrates, and Compensation Commissioners Retirement System (CT JFSMCCRS) is a defined benefit pension plan established by the Connecticut General Assembly for the purpose of providing retirement allowances and other benefits for Judges, Family Support Magistrates, and Compensation Commissioners in Connecticut, and their survivors and other beneficiaries.

**Eligibility Requirements** Any appointed Judge, Family Support Magistrate, or Compensation Commissioner of the State of Connecticut.

**Final Average Compensation** For members hired prior to July 1, 2011, salary of office;  
For members hired on or after July 1, 2011, Average annual salary for 5 years preceding retirement;

plus longevity payments based on service as follows:

<b>Completed Years of Service</b>	<b>Annual Longevity as % of Compensation</b>
0-9	0.0%
10-14	1.5%
15-19	3.0%
20-24	4.5%
25 or more	6.0%

**Normal Retirement Benefit**

**Eligibility** For those who retire before July 1, 2022, the earliest of age 65 or 20 years of service or 30 years of total state service with at least 10 years as a Judge, Family Support Magistrate or Compensation Commissioner.

For those who retire on or after July 1, 2022, the earliest of age 65 with 10 years of vesting service, age 63 with 25 years of vesting service, or 30 years of vesting service.

Retirement is mandatory at age 70.

**Benefit** 66.67% of Final Average Compensation reduced for less than 10 years of service by a ratio of the number of years of completed service to the number of years of service which would have been completed at age 70, or 10 years, whichever is less.



**Disability Retirement Benefit**

Any member becoming permanently disabled is entitled to 66.67% of Final Average Compensation commencing upon determination of disability.

**Death Benefit**

The spouse of any member who was hired before January 1, 1981 and dies in active service or after retirement is entitled to 33.33% of the final compensation of the member at time of death commencing the first of the month after death.

The spouse of any member who was hired on or after January 1, 1981 and dies in active service is entitled to 33.33% of the final compensation of the member at time of death commencing the first of the month after death.

The spouse of any member who was hired on or after January 1, 1981 and who dies after retirement is entitled to 50% of the monthly benefit of the member at the time of death.

The spouse of any member who dies after leaving active service and before retirement is entitled to 50% of the benefit the member would have received upon retirement commencing when the member would have been eligible.

**Deferred Vested Retirement Benefit**

Eligibility

10 years of service.

Benefit

Members hired before 1981 who resign on or before October 1, 2011 – 50% of the retirement benefit at 10 years increasing to 100% after 15 years.

Members hired before 1981 who resign on or after October 2, 2011 – 100% of the retirement benefit multiplied by the ratio of service at termination to projected service at the earliest retirement age (the earlier of age 65 or 20 years of service).

Members hired on or after January 1, 1981 – 100% of the retirement benefit multiplied by the ratio of service at termination to projected service at the earliest retirement age (the earlier of age 65 or 20 years of service).

Commencement

For members who resign on or before October 1, 2011 - Benefits shall commence upon the attainment of the earlier of age 65 or the attainment of 20 years of service (assuming the member had remained in service).

For members hired before 1981 who resign on or after October 2, 2011 – Benefits shall commence no earlier than at age 62.



For members hired on or after January 1, 1981 who resign on or after October 2, 2011 – Benefits shall commence no earlier than at age 65.

**Cost of Living Adjustments**

For members hired prior to 1981 and retire prior to October 2, 2011, benefits are increased in line with current compensation of an active member in the same position.

For members hired on or after January 1, 1981 and retire prior to October 2, 2011, benefits are increased in line with a cost of living index, not to exceed 3% per year.

For members retiring on or after October 2, 2011 and all surviving spouses, the annual adjustment will be 60% of the increase in CPI up to 6% and 75% of the increase in the CPI over 6%. The minimum COLA shall be 2.0% and the maximum COLA shall be 7.5%.

**Member Contributions**

Members contribute 5% of annual compensation. Upon withdrawal prior to benefit eligibility, contributions are refunded without interest.





**SCHEDULE G**

**TABLES OF MEMBERSHIP DATA**

**STATUS RECONCILIATION OF ACTIVE AND INACTIVE MEMBERS**

	<u>Actives</u>	<u>Retirees</u>	<u>Disabled</u>	<u>Beneficiaries</u>	<u>Vested Terms</u>	<u>Total</u>
1. Headcounts as of June 30, 2010	212	149	0	81	2	444
2. Change in status during two year period:						
a. Death		(14)		(10)		(24)
b. Disabled						
d. Retired	(23)	23				
e. Terminated Vested						
f. Terminated Not Vested						
g. Benefits Expired/Refund						
3. New member due to:						
a. New Hires	15					15
b. Rehires						
c. Death of Participant				9		9
d. Adjustments				1		1
4. Headcounts as of June 30, 2012	204	158	0	81	2	445



**SCHEDULE G**  
**(Continued)**

**The Number and Average Annual Compensation of Active Employees  
By Age and Benefit Service as of June 30, 2012**

Age	Years of Benefit Service									Total
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 & Up	
Under 25	0	0	0	0	0	0	0	0	0	0
Avg. Pay	0	0	0	0	0	0	0	0	0	0
25 to 29	0	0	0	0	0	0	0	0	0	0
Avg. Pay	0	0	0	0	0	0	0	0	0	0
30 to 34	0	0	1	0	0	0	0	0	0	1
Avg. Pay	0	0	\$118,513	0	0	0	0	0	0	\$118,513
35 to 39	0	0	0	0	0	0	0	0	0	0
Avg. Pay	0	0	0	0	0	0	0	0	0	0
40 to 44	0	6	0	0	0	0	0	0	0	6
Avg. Pay	0	\$121,962	0	0	0	0	0	0	0	\$121,962
45 to 49	0	7	5	4	1	0	0	0	0	17
Avg. Pay	0	\$142,880	\$149,534	\$117,636	\$118,473	0	0	0	0	\$137,462
50 to 54	0	9	12	6	2	0	0	0	0	29
Avg. Pay	0	\$141,302	\$149,989	\$151,841	\$150,387	0	0	0	0	\$147,704
55 to 59	1	8	14	17	11	1	0	0	0	52
Avg. Pay	\$146,780	\$141,840	\$148,370	\$151,576	\$154,921	\$152,823	0	0	0	\$149,854
60 to 64	3	12	7	14	20	11	0	0	0	67
Avg. Pay	\$146,780	\$146,506	\$148,551	\$151,728	\$154,101	\$154,323	0	0	0	\$151,374
65 to 69	0	2	4	9	6	5	2	1	0	29
Avg. Pay	0	\$146,780	\$150,165	\$151,957	\$152,582	\$153,601	\$155,306	\$171,649	0	\$152,676
70 & Up	0	0	0	0	1	0	2	0	0	3
Avg. Pay	0	0	0	0	\$164,958	0	\$155,306	0	0	\$158,523
Total	4	44	43	50	41	17	4	1	0	204
Avg. Pay	\$146,780	\$140,682	\$148,459	\$149,004	\$153,313	\$154,022	\$155,306	\$171,649	0	\$148,569

Average Age: 58.3  
 Average Benefit Service: 11.1  
 Average Eligibility Service: 20.0



**SCHEDULE G**  
**(Continued)**

**NUMBER OF RETIRED MEMBERS  
AND THEIR BENEFITS BY AGE**

<b>Age</b>	<b>Number</b>	<b>Total Annual Benefits</b>	<b>Average Annual Benefits</b>
Under 60	1	\$ 118,293	\$ 118,293
60 – 64	9	929,052	103,228
65 – 69	16	1,713,805	107,113
70 – 74	38	4,054,709	106,703
75 – 79	32	3,360,770	105,024
80 – 84	37	3,788,192	102,384
85 – 89	19	1,874,326	98,649
90 & Over	6	600,798	100,133
Total	158	\$ 16,439,945	\$ 104,050

**NUMBER OF BENEFICIARIES  
AND THEIR BENEFITS BY AGE**

<b>Age</b>	<b>Number</b>	<b>Total Annual Benefits</b>	<b>Average Annual Benefits</b>
Under 60	2	\$ 158,661	\$ 79,331
60 – 64	4	201,404	50,351
65 – 69	6	289,280	48,213
70 – 74	11	563,046	51,186
75 – 79	13	633,481	48,729
80 – 84	12	592,466	49,372
85 – 89	14	695,337	49,667
90 & Over	19	945,682	49,773
Total	81	\$ 4,079,357	\$ 50,362

In addition, there are 2 deferred vested employees entitled to deferred annual benefits totaling \$104,325.



## SCHEDULE H

### ANALYSIS OF FINANCIAL EXPERIENCE

#### Gains & Losses in Accrued Liabilities Resulting from Difference Between Assumed Experience & Actual Experience (\$ Thousands)

Type of Activity	\$ Gain (or Loss) For Two Year Period Ending 6/30/2012
<b>Age &amp; Service Retirements.</b> If members retire at older ages, there is a gain. If younger ages, a loss.	\$ (1,576.0)
<b>Disability Retirements.</b> If disability claims are less than assumed, there is a gain. If more claims, a loss.	1,473.0
<b>Death-in Service Benefits.</b> If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(449.4)
<b>Withdrawal From Employment.</b> If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	0.0
<b>Pay Increases.</b> If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss.	12,208.4
<b>New Members.</b> Additional unfunded accrued liability will produce a loss.	(2,431.3)
<b>Investment Income.</b> If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(12,105.3)
<b>Death After Retirement.</b> If retirants live longer than assumed, there is a loss. If not as long, a gain.	(3,274.6)
<b>Other.</b> Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.*	<u>(15,648.3)</u>
<b>Gain (or Loss) During Year From Financial Experience</b>	<u>\$ (21,803.5)</u>
<b>Non-Recurring Items.</b> Adjustments for plan amendments, assumption changes, or method changes.	<u>(5,102.0)</u>
<b>Composite Gain (or Loss) During Year</b>	<u>\$ (26,905.5)</u>

\*Fix in programming to include SERS service for eligibility purposes