PUBLIC EMPLOYEES' RETIREMENT SYSTEM OF NEW JERSEY REPORT ON AN INVESTIGATION OF EXPERIENCE PREPARED AS OF JUNE 30, 2008

DOC:V02311JC.DOC





May 29, 2009

Board of Trustees Public Employees' Retirement System of New Jersey Trenton, New Jersey 08625-0295

Ladies and Gentlemen:

This year an actuarial investigation of the mortality, service and compensation experience of the members and beneficiaries of the retirement system was made in accordance with the provisions of Section 19 of Chapter 15A of the New Jersey Statutes. This Section specifies that such an investigation shall be made once in every three-year period. The results of this investigation are described in detail in the attached report. I am available at the Board's convenience to discuss this report.

To the best of our knowledge, this experience investigation report is complete and accurate. The experience investigation was performed by, and under the supervision of, independent qualified actuaries who are members of the American Academy of Actuaries with experience in performing experience investigations for public retirement systems.

Respectfully submitted,

John

Janet H. Cranna, F.S.A., E.A., M.A.A.A. Principal, Consulting Actuary

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REPORT ON AN INVESTIGATION OF THE EXPERIENCE OF THE PUBLIC EMPLOYEES' RETIREMENT SYSTEM OF NEW JERSEY PREPARED AS OF JUNE 30, 2008

I. INTRODUCTION

Section 19 of Chapter 15A of the New Jersey Statutes provides that once in every three-year period the actuary shall examine in detail the mortality, service and compensation experience of the members and beneficiaries of the Retirement System. This investigation is designed to assure that the tables used for determining expected liabilities of the Retirement System are consistent with recent experience. If tables are not updated periodically, the liabilities of the System may be overstated or understated, and resulting contributions either too large or too small to fund the actual accruing liabilities.

This report summarizes the Retirement System experience for the period from July 1, 2005 to June 30, 2008. Experience for State employees and for employees of the various local employers participating in the System was examined separately for active members. No separate examination was made for retired members and beneficiaries since similar mortality experience should be anticipated for these groups.

Also, this study examined the effect of the following legislations:

• Chapter 366, P.L. 2001 established a special Prosecutors Part for certain members of the System. The eligibility requirements and benefits payable under this Part are similar to those applicable under the Police and Firemen's Retirement System ("PFRS"). Beginning



with the June 30, 2005 experience study, we have separately analyzed the retirement pattern of prosecutor members.

- Chapter 259, P.L. 2001 created special retirement benefits, similar to those provided in the Judicial Retirement System, for members employed as Workers Compensation Judges. However, Chapter 92, P.L. 2007 closed the Workers Compensation Judges Part of the System to new members enrolled after June 8, 2007. Due to the small number of Workers Compensation Judges and the closure of this Part of the System, their experience will no longer be analyzed separately. The remaining members of the Workers Compensation Judges Part of the System will continue to use the State assumptions.
- Chapter 103, P.L. 2007 changed member contribution rates from 5.0% to 5.5% of compensation effective, generally, July 1, 2007 for State employees and July 1, 2008 for Local employees. The legislation also provided that for members hired on or after July 1, 2007, the amount of compensation used for employer and member contributions and benefits under the System for new members on or after July 1, 2007 cannot exceed the annual maximum wage contribution base for Social Security, pursuant to the Federal Insurance Contributions Act. The legislation also amended the early retirement reduction formula for members hired on or after July 1, 2007 and retiring with 25 years of service to be reduced by 1/12 percent for each month (up to 60 months) the retirement date precedes age 60 plus 1/4 percent for each month the retirement date precedes age 55. At this time,



there is not enough data to analyze the effect that this legislation will have on the assumptions.

To avoid inflating assumed future rates of retirement that are not representative of "normal" retirement experience, we removed the effects of Chapter 21, P.L. 2008, Chapter 126, P.L. 2000, Chapter 127, P.L. 2003, Chapter 128, P.L. 2003 and Chapter 129, P.L. 2003 which provided Early Retirement Incentive (ERI) programs for the State and local employees. To remove the effect of the ERI's, all members who elected to retire under one of the ERI programs were excluded from the examination of the active members' experience portion of this study.

II. EXAMINATION OF EXPERIENCE

The experience among active members has been compared with the experience expected according to the active service tables, the retirement tables and the salary increase assumption which were developed on the basis of the three-year experience investigation for the period ended June 30, 2005. The experience among beneficiaries has also been compared with the experience expected according to the mortality tables that were also developed from the three-year experience investigation for the period ended June 30, 2005.

In the case of withdrawals who are receiving a refund of accumulated deductions, since the Board has adopted select rates of withdrawal, the data for employees with less than three years of service were tabulated separately from the data for employees with three or more years of service but prior to retirement eligibility. However, in investigating the experience with respect to death, disability,



vested withdrawal entitled to a deferred benefit or early retirement and service retirement, the employees were not divided according to select and ultimate years of service but were treated in one group. The expected number of separations from service on account of withdrawal, death, disability and service retirement were calculated by multiplying the rates of separation used as a basis for the active service tables by the number of those exposed to risk. The actual number of those who had separated from service was then compared with the expected number. The following tables give the results of these comparisons. If the ratio of actual to expected is 1.000, the tables have exactly predicted what actually occurred. If the ratio of actual to expected is greater than 1.000, then the tables have underestimated actual experience. If the ratio is less than 1.000, then the tables have overstated actual experience.

Table 1 examines experience for State employees, while Table 2 considers experience for employees of local employers.

For the Board's convenience, we have prepared a series of graphs, which present the statistical data.



COMPARISON OF ACTUAL AND EXPECTED SEPARATIONS FROM ACTIVE SERVICE STATE EMPLOYEES

WITHDRAWALS RECEIVING REFUND OF ACCUMULATED DEDUCTIONS

		NUMBER OF SEPARATIONS			
YEARS OF SERVICE	CENTRAL AGE OF GROUP	Actual	Expected	Ratio of Actual to Expected	
0	All	4,458	2,920.19	1.527	
1	All	1,805	2,866.28	.630	
2	All	1,254	1,798.07	.697	
Ultimate	20	4	21.51	.186	
	25	216	510.67	.423	
	30	572	787.38	.726	
	35	564	667.95	.844	
	40	450	529.76	.849	
	45	402	524.67	.766	
	50	319	468.23	.681	
	55	324	511.37	.634	
Subtotal Ultimate		2,851	4,021.54	.709	
Total Withdrawals All					
Years		10,368	11,606.08	.893	



COMPARISON OF ACTUAL AND EXPECTED SEPARATIONS FROM ACTIVE SERVICE STATE EMPLOYEES (continued)

DEATHS DUE TO ORDINARY CAUSE

		NUMBER OF SEPARATIONS			
ТҮРЕ	CENTRAL AGE OF GROUP	Actual	Expected	Ratio of Actual to Expected	
Male					
	20	1	.56	1.786	
	25	4	3.44	1.163	
	30	5	5.24	.954	
	35	6	7.58	.792	
	40	10	13.84	.723	
	45	23	24.95	.922	
	50	42	44.20	.950	
	55	50	62.29	.803	
	60	43	59.78	.719	
	65	29	32.01	.906	
	69	4	7.49	.534	
	Total	217	261.38	.830	
Female					
	20	1	.79	1.266	
	25	4	6.62	.604	
	30	3	9.76	.307	
	35	9	14.32	.628	
	40	14	24.56	.570	
	45	23	41.79	.550	
	50	45	66.77	.674	
	55	67	86.64	.773	
	60	55	83.01	.663	
	65	40	45.55	.878	
	69	5	8.57	.583	
	Total	266	388.38	.685	
	Grand Total	483	649.76	.743	





COMPARISON OF ACTUAL AND EXPECTED SEPARATIONS FROM ACTIVE SERVICE STATE EMPLOYEES (continued)

NUMBER OF SEPARATIONS CENTRAL **Ratio of** TYPE AGE OF Actual to GROUP Expected Actual Expected **Male and Female** 20 0 .03 .000 .000 25 0 .20 30 0 .25 .000 35 0 .26 .000 40 0 .34 .000 0 .43 .000 45 50 0 .47 .000 55 0 .000 .42 0 .000 60 .31 65 0 .12 .000 69 0 .02 .000 0 2.85 .000 Total

DEATHS DUE TO ACCIDENTAL CAUSES



COMPARISON OF ACTUAL AND EXPECTED SEPARATIONS FROM ACTIVE SERVICE STATE EMPLOYEES (continued)

DISABILITY RETIREMENTS

		NUMBER OF SEPARATIONS			
ТҮРЕ	CENTRAL AGE OF GROUP	Actual	Expected	Ratio of Actual to Expected	
Due to Ordinary					
Causes	30	1	.61	1.639	
	35	15	14.80	1.014	
	40	64	56.90	1.125	
	45	111	124.53	.891	
	50	155	183.84	.843	
	55	165	259.34	.636	
	60	198	317.09	.624	
	65	110	131.32	.838	
	69	19	23.77	.799	
	Total	838	1,112.20	.753	
Due to Accidental					
Causes	20	0	.03	.000	
	25	2	.26	7.692	
	30	0	.84	.000	
	35	3	2.44	1.230	
	40	3	5.10	.588	
	45	13	8.17	1.591	
	50	15	11.14	1.346	
	55	11	13.58	.810	
	60	9	12.10	.744	
	65	3	5.76	.521	
	69	0	.99	.000	
	Total	59	60.41	.977	
Due to All Causes	Grand Total	897	1,172.61	.765	



COMPARISON OF ACTUAL AND EXPECTED SEPARATIONS FROM ACTIVE SERVICE STATE EMPLOYEES (continued)

DEFERRED VESTED, EARLY AND SERVICE RETIREMENTS

		NUMBER OF SEPARATIONS			
ТҮРЕ	CENTRAL AGE OF GROUP	Actual	Expected	Ratio of Actual to Expected	
Deferred Vested and Early Retirement	20 25 30 35 40 45 50 55	0 0 1 9 11 92 405 483	$\begin{array}{r} .00\\ .00\\ .00\\ 2.77\\ 8.95\\ 62.64\\ 214.09\\ 203.17\end{array}$	$\begin{array}{r} .000\\ .000\\ .000\\ 3.249\\ 1.229\\ 1.469\\ 1.892\\ 2.377\end{array}$	
	Total	1,001	491.63	2.036	
	56 57 58 59 60 61 62 63 64 65 66 (7	310 301 270 270 688 426 562 381 347 321 220	268.46 253.46 232.40 387.87 542.53 429.35 751.32 507.50 451.65 529.00 295.92	$ \begin{array}{r} 1.155\\ 1.188\\ 1.162\\ .696\\ 1.268\\ .992\\ .748\\ .751\\ .768\\ .607\\ .743\\ .828 \end{array} $	
	67 68 69 Total	160 133 91 4,885	190.95 160.65 127.95 5,534.18	.838 .828 .711 .883	





COMPARISON OF ACTUAL AND EXPECTED SEPARATIONS FROM ACTIVE SERVICE STATE EMPLOYEES (continued)

CHAPTER 366, P.L. 2001 – PROSECUTORS PART SERVICE RETIREMENTS

	Age 55 with Less Than 20 Years of Service			With 20 Years of Service			
AGE	Actual	Expected	Ratio of Actual to Expected	Actual	Expected	Ratio of Actual to Expected	
40				0	.00	.000	
45				0	.26	.000	
50				0	.49	.000	
53				0	.25	.000	
54	0	0.6	000	1	.05	20.000	
55	0	.06	.000	0	.00	.000	
56	0	.06	.000	0	.00	.000	
57	0	.03	.000	0	.00	.000	
58	0	.08	.000	0	.00	.000	
59	0	.08	.000	0	.00	.000	
6U (1	0	.11	.000	0	.05	.000	
01	1	.08	12.300	0	.00	.000	
02	0	.03	.000	0	.00	.000	
03	0	.05	.000	1	.13	0.007	
04 65	0	.03	.000	0	.00	.000	
05	0	.03	.000	0	.00	.000	
00 47	0	.02	.000	0	.00	.000	
0/	0	.00	.000	1	.38	2.007	
60	0	.00	.000	1	.38	∠.007 000	
	1	.00	1.471	0	.00	2,000	
Total	1	.68	1.471	4	2.00	2.000	



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COMPARISON OF ACTUAL AND EXPECTED SEPARATIONS FROM ACTIVE SERVICE STATE EMPLOYEES (continued)

CHAPTER 366, P.L. 2001 – PROSECUTORS PART SERVICE RETIREMENTS

	With 21 to 24 Years of Service			With More Than 24 Years of Service		
AGE	Actual	Expected	Ratio of Actual to Expected	Actual	Expected	Ratio of Actual to Expected
40	0	.00	.000	0	.00	.000
45	0	.00	.000	0	.00	.000
50	0	.00	.000	9	3.55	2.538
53	0	.00	.000	3	1.04	2.872
54	0	.00	.000	1	.70	1.429
55	0	.00	.000	4	1.21	3.293
56	0	.00	.000	3	.87	3.448
57	0	.00	.000	1	.17	5.882
58	0	.00	.000	1	.34	2.900
59	0	.00	.000	1	1.14	.879
60	0	.00	.000	2	.91	2.198
61	0	.00	.000	1	.91	1.102
62	0	.00	.000	0	.00	.000
63	0	.00	.000	0	.00	.000
64	0	.00	.000	1	.76	1.316
65	0	.00	.000	2	2.00	1.000
66	0	.00	.000	0	.00	.000
67	0	.00	.000	0	.00	.000
68	0	.00	.000	0	.00	.000
69	0	.00	.000	0	1.00	.000
Total	0	0.00	0.000	29	14.61	1.986



COMPARISON OF ACTUAL AND EXPECTED SEPARATIONS FROM ACTIVE SERVICE LOCAL EMPLOYEES

WITHDRAWALS RECEIVING REFUND OF ACCUMULATED DEDUCTIONS

		NUMBER OF SEPARATIONS			
YEARS OF SERVICE	CENTRAL AGE OF GROUP	Actual	Expected	Ratio of Actual to Expected	
0	All	11,496	7,744.14	1.484	
1	All	5,891	7,390.14	.797	
2	All	3,822	3,622.62	1.055	
Ultimate	20	24	103.80	.231	
	25	585	1,080.58	.541	
	30	1,116	1,519.26	.735	
	35	1,167	1,339.79	.871	
	40	1,380	1,747.46	.790	
	45	1,802	2,303.17	.782	
	50	1,662	2,131.57	.780	
	55	1,422	1,930.82	.736	
Subtotal Ultimate		9,158	12,156.45	.753	
Total Withdrawals All					
Years		30,367	30,913.35	.982	



COMPARISON OF ACTUAL AND EXPECTED SEPARATIONS FROM ACTIVE SERVICE LOCAL EMPLOYEES (continued)

DEATHS DUE TO ORDINARY CAUSES

		NUMBI	ER OF SEPARA	TIONS
ТҮРЕ	CENTRAL AGE OF GROUP	Actual	Expected	Ratio of Actual to Expected
Males				
	20	0	1.81	.000
	25	6	6.22	.965
	30	11	8.35	1.317
	35	27	13.51	1.999
	40	29	28.11	1.032
	45	53	53.94	.983
	50	109	93.01	1.172
	55	126	121.12	1.040
	60	133	141.09	.943
	65	114	111.59	1.022
	69	33	33.13	.996
	Total	641	611.88	1.048
Female				
	20	2	1.69	1.183
	25	1	7.67	.130
	30	5	9.89	.506
	35	12	17.40	.690
	40	23	41.04	.560
	45	46	89.67	.513
	50	88	159.23	.553
	55	103	202.00	.510
	60	127	227.74	.558
	65	90	160.88	.559
	69	34	41.76	.814
	Total	531	958.97	.554
	Grand Total	1,172	1,570.85	.746



COMPARISON OF ACTUAL AND EXPECTED SEPARATIONS FROM ACTIVE SERVICE LOCAL EMPLOYEES (continued)

NUMBER OF SEPARATIONS CENTRAL **Ratio of** TYPE AGE OF Actual to GROUP Actual Expected Expected Male and Female .09 20 0 .000 .000 25 0 .34 30 0 .36 .000 35 0 .48 .000 40 0 .74 .000 0 1.04 .000 45 50 0 .000 1.14 55 0 .99 .000 0 .78 .000 60 65 0 .40 .000 69 .09 0 .000 0 6.45 .000 Total

DEATHS DUE TO ACCIDENTAL CAUSES



COMPARISON OF ACTUAL AND EXPECTED SEPARATIONS FROM ACTIVE SERVICE LOCAL EMPLOYEES (continued)

DISABILITY RETIREMENTS

		NUMBER OF SEPARATIONS			
ТҮРЕ	CENTRAL AGE OF GROUP	Actual	Expected	Ratio of Actual to Expected	
Due to Ordinary					
Causes	30	1	1.76	.568	
	35	22	25.80	.853	
	40	87	92.20	.944	
	45	171	163.37	1.047	
	50	286	292.00	.979	
	55	344	430.88	.798	
	60	408	501.23	.814	
	65	287	300.44	.955	
	69	65	73.96	.879	
	Total	1,671	1,881.64	.888	
Due to Accidental					
Causes	20	0	.09	.000	
	25	0	.89	.000	
	30	0	1.46	.000	
	35	4	2.19	1.826	
	40	8	5.99	1.336	
	45	12	10.96	1.095	
	50	10	16.66	.600	
	55	20	17.88	1.119	
	60	11	17.75	.620	
	65	7	10.08	.694	
	69	3	2.24	1.339	
	Total	75	86.19	.870	
Due to All Causes	Grand Total	1,746	1,967.83	.887	



COMPARISON OF ACTUAL AND EXPECTED SEPARATIONS FROM ACTIVE SERVICE LOCAL EMPLOYEES (continued)

DEFERRED VESTED, EARLY AND SERVICE RETIREMENTS

		NUMBER OF SEPARATIONS			
ТҮРЕ	CENTRAL AGE OF GROUP	Actual	Expected	Ratio of Actual to Expected	
Deferred Vested and Early Retirement	20 25 30 35 40 45 50 55 Total	0 0 2 7 19 98 431 797 1,354	.00 .00 .46 4.35 13.80 94.09 346.67 434.63 893.99	$\begin{array}{r} .000\\ .000\\ 4.346\\ 1.608\\ 1.377\\ 1.042\\ 1.243\\ 1.834\\ 1.515\end{array}$	
Service Retirement	55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 Total	556 281 284 295 340 1,676 1,052 1,403 1,062 866 1,137 827 636 485 461 11,361	$\begin{array}{c} 308.88\\ 292.38\\ 288.76\\ 300.69\\ 747.89\\ 1,282.48\\ 1,134.76\\ 1,992.65\\ 1,129.06\\ 996.13\\ 1,801.26\\ 1,010.68\\ 752.80\\ 545.28\\ 486.95\\ 13,070.63\end{array}$	1.800 .961 .984 .981 .455 1.307 .927 .704 .941 .869 .631 .818 .845 .889 .947 .869	
Due to all Causes	Grand Total	12,715	13,964.62	.911	





COMPARISON OF ACTUAL AND EXPECTED SEPARATIONS FROM ACTIVE SERVICE LOCAL EMPLOYEES (continued)

CHAPTER 366, P.L. 2001 – PROSECUTORS PART SERVICE RETIREMENTS

	Age 55 with Less Than 20 Years of Service			With	20 Years of Se	ervice
AGE	Actual	Expected	Ratio of Actual to Expected	Actual	Expected	Ratio of Actual to Expected
40				0	.03	.000
45				1	1.20	.833
50				2	1.20	1.670
53				1	.25	4.00
54		25	000	0	.05	.000
55	0	.37	.000	0	.05	.000
56	0	.37	.000	0	.05	.000
57	1	.34	2.941	0	.05	.000
58	0	.24	.000	1	.15	6.667
59		.18	.000	0	.05	.000
60	0	.15	.000	l	.05	20.000
61		.12	8.333	1	.15	6.667
62	0	.15	.000	0	.00	.000
63		.12	8.333	0	.00	.000
64	0	.12	.000		.38	2.007
05		.06	10.007	1	.38	2.632
66 (7	0	.03	.000	0	.00	.000
0/		.06	.000	0	.00	.000
00		.00	.000		.38	.000
09	0	.00	.000	0	.00	.000
Total	4	2.31	1.732	9	4.41	2.040



COMPARISON OF ACTUAL AND EXPECTED SEPARATIONS FROM ACTIVE SERVICE LOCAL EMPLOYEES (continued)

CHAPTER 366, P.L. 2001 – PROSECUTORS PART SERVICE RETIREMENTS

	With 21 to 24 Years of Service			With More Than 24 Years of Service			
AGE	Actual	Expected	Ratio of Actual to Expected	Actual	Expected	Ratio of Actual to Expected	
40	0	.00	.000	0	.00	.000	
45	0	.00	.000	0	.00	.000	
50	0	.00	.000	6	4.31	1.392	
53	0	.00	.000	2	3.50	.571	
54	0	.00	.000	4	3.49	1.145	
55	0	.00	.000	6	3.67	1.635	
56	0	.00	.000	4	2.45	1.633	
57	0	.00	.000	6	2.79	2.151	
58	0	.00	.000	5	3.14	1.590	
59	0	.00	.000	3	2.96	1.014	
60	0	.00	.000	6	2.96	2.029	
61	0	.00	.000	0	1.37	.000	
62	0	.00	.000	2	1.60	1.252	
63	0	.00	.000	4	1.60	2.503	
64	0	.00	.000	0	1.89	.000	
65	1	.00	.000	1	4.00	.250	
66	0	.00	.000	2	3.00	.667	
67	0	.00	.000	1	2.00	.500	
68	0	.00	.000	0	1.00	.000	
69	1	.00	.000	0	1.00	.000	
Total	2	.00	0.000	52	46.73	1.113	





Based on the salary increase assumption, the expected salaries of those members who remain in service from year to year were obtained and these expected salaries were compared with the actual salaries. This comparison is summarized in the following tables, with Table 3 showing values for State employees and Table 4 for employees of local employers. Again, a ratio of actual to expected of 1.000 would indicate actual salary increases were identical to anticipated increases, greater than 1.000 indicates salaries have increased faster than anticipated, and less than 1.000 indicates salaries have increased faster.



COMPARISON OF ACTUAL AND EXPECTED SALARIES OF MEMBERS STATE EMPLOYEES

	SALARIES AT END OF YEAR					
CENTRAL AGE OF GROUP	Actual		Expected		Ratio of Actual to Expected	
20 25 30 35 40 45 50 55 60	\$	51,237,166 525,938,485 810,405,876 1,031,864,467 1,509,050,381 2,054,258,402 2,382,270,499 2,144,493,312 1,398,939,633 405,201,887	\$	49,110,371 509,268,331 792,510,493 1,015,235,238 1,492,586,986 2,037,276,383 2,366,017,456 2,128,606,203 1,386,284,722 480,276,120	1.0433 1.0327 1.0226 1.0164 1.0110 1.0083 1.0069 1.0075 1.0091	
os Total	\$	493,301,887 12,403,760,108	\$	489,276,129 12,266,172,312	1.0123	





COMPARISON OF ACTUAL AND EXPECTED SALARIES OF MEMBERS LOCAL EMPLOYEES

	SALARIES AT END OF YEAR						
CENTRAL AGE OF GROUP	Actual		Expected		Ratio of Actual to Expected		
20 25 30 35 40 45 50 55 60 65	\$	105,254,625 596,541,491 873,908,536 1,378,920,448 2,209,225,496 3,157,154,567 3,668,837,944 3,332,491,279 2,494,508,096 1,007,813,257	\$	100,729,750 582,906,385 864,877,694 1,370,000,076 2,194,368,526 3,137,255,687 3,650,532,209 3,321,480,070 2,486,731,908	1.0449 1.0234 1.0104 1.0065 1.0068 1.0063 1.0050 1.0033 1.0031 1.0049		
Total	\$	18,914,655,739	\$	18,801,396,729	1.0049		





The following tables give a comparison of the actual and expected deaths among retired members and their beneficiaries. In obtaining the expected deaths, the rates of mortality employed as a basis for the mortality tables last adopted by the Board for pensioners and their beneficiaries were used. As noted earlier, experience was not separately analyzed for employees of the State and local employers. A ratio of actual to expected of 1.000 means deaths occurred exactly as anticipated, higher than 1.000 means more deaths occurred than expected, and less than 1.000 means fewer deaths occurred than expected.



COMPARISON OF ACTUAL AND EXPECTED CASES OF DEATH AMONG RETIRED MEMBERS STATE AND LOCAL COMBINED

	MEN			WOMEN					
CENTRAL AGE OF GROUP	Actual	Expected	Ratio of Actual to Expected	Actual	Expected	Ratio of Actual to Expected			
	Service Retirements, Early Retirements and								
	Deferr	ed Vested Ben	efits Which H	ave Become P	ayable				
50	8	2.3	3.478	1	2.2	.455			
55	39	22.1	1.765	35	15.6	2.244			
60	131	103.5	1.266	100	88.4	1.131			
65	315	299.4	1.052	239	329.1	.726			
70	600	578.1	1.038	486	619.4	.785			
75	932	1,032.0	.903	883	1,042.3	.847			
80	1,270	1,494.1	.850	1,175	1,463.7	.803			
85	1,258	1,539.7	.817	1,258	1,603.2	.785			
90	805	979.9	.822	996	1,121.4	.888			
95 and over	340	386.7	.879	552	542.2	1.018			
Total	5,698	6,437.8	0.885	5,725	6,827.5	0.839			
		Disa	bility Retirem	ents					
45 and under	24	41.9	.573	15	29.8	.503			
50	39	46.6	.837	32	47.9	.668			
55	64	80.0	.800	49	77.3	.634			
60	84	119.4	.704	80	103.5	.773			
65	105	157.3	.668	120	141.0	.851			
70	112	137.1	.817	123	128.4	.958			
75	92	94.6	.973	71	83.0	.855			
80	50	60.7	.824	37	57.6	.642			
85	39	43.4	.899	37	40.8	.907			
90	10	13.0	.769	7	16.2	.432			
95 and over	1	3.5	.286	2	2.6	.769			
Total	620	797.5	.777	573	728.1	.787			

NUMBER OF DEATHS



COMPARISON OF ACTUAL AND EXPECTED CASES OF DEATH AMONG DEPENDENTS OF ACTIVE AND RETIRED MEMBERS WHO HAVE DIED STATE AND LOCAL COMBINED

	MEN			WOMEN					
CENTRAL AGE OF GROUP	Actual	Expected	Ratio of Actual to Expected	Actual	Expected	Ratio of Actual to Expected			
	Dependents of Members Who Died While in Active Service								
65	0	.0	.000	0	.0	.000			
70	0	.2	.000	0	.2	.000			
75	0	.0	.000	0	.0	.000			
80	0	.0	.000	0	.7	.000			
85	0	.0	.000	1	1.8	.556			
90	0	.0	.000	2	4.7	.426			
95 and over	0	.0	.000	1	3.6	.278			
Total	0	.2	.000	4	11.0	0.364			
		Dependent	s of Deceased	Pensioners					
45 and under	1	.6	1.667	2	.6	3.333			
50	1	.9	1.111	1	1.3	.769			
55	1	1.8	.556	5	2.8	1.786			
60	4	3.5	1.143	14	8.0	1.750			
65	5	7.7	.649	34	21.5	1.581			
70	6	15.8	.380	50	56.1	.891			
75	11	27.1	.406	119	144.7	.822			
80	35	43.0	.814	256	291.2	.879			
85	44	56.5	.779	344	468.5	.734			
90	30	31.6	.949	326	375.5	.868			
95 and over	12	15.5	.774	220	246.3	.893			
Total	150	204.0	.735	1,371	1,616.5	.848			

NUMBER OF DEATHS



III. COMMENTS AND GENERAL RECOMMENDATION OF THE ACTUARY

RATES OF WITHDRAWALS RECEIVING REFUND OF ACCUMULATED DEDUCTIONS

Beginning with this study, the withdrawal experience of employees during their first, second and third years of service is evaluated separately. Table 1 shows that, for State employees, actual withdrawals during the first year of service have been about 153% of the number expected. Conversely, actual withdrawals during the second and third year of service have been about 63% and 70%, respectively, of the number expected. Therefore, we recommend an increase in the rates during the first year of service and a decrease in the rates during the second and third years of service. For withdrawals with three or more years of service, actual withdrawals are about 71% of the number expected. This result is consistent with the prior study and we recommend a decrease in these rates.

Table 2, employees of local employers, shows that actual withdrawals during the first year of service are about 148% of that expected. In contrast, actual withdrawals during the second year of service are 80% of that expected. Actual withdrawals during the third year of service are about 106% of that expected which is within an acceptable range. Therefore, we recommend an increase to the rates during the first year of service, a decrease in the rates during the second year of service and no change to the rates during the third year of service. The actual member withdrawals after the first three years are about 25% lower than expected. Therefore, we recommend a decrease in the rates.

The following graphs show the current withdrawal rates, the actual withdrawal rates and the proposed rates.











RATES OF DEATH AMONG ACTIVE MEMBERS

Since different benefits are paid upon ordinary and accidental death, the mortality experience with respect to these two causes of death was investigated separately. Tables 1 and 2 show that, with respect to both ordinary and accidental death, the total number of actual deaths was less than that expected. This pattern has held true for both State and employees of local employers over the past 27 years. In light of this pattern and the continued mortality improvement in the general population, we propose the use of a recently published mortality table for deaths due to ordinary causes. No change is recommended in the accidental death rates for either group since their experience is close to what was expected relative to the small incidence of this event. The graphs on pages 32 through 34 show the current, actual and proposed rates for ordinary and accidental deaths.

RATES OF DISABILITY RETIREMENT

For disability retirements, ordinary and accidental disability rates are examined separately. Tables 1 and 2 indicate that for both State and employees of local employers, overall, the tables presently in use result in the actual number of ordinary disabilities being less than the expected number of ordinary disabilities. This is inconsistent with the results of the four prior studies. Therefore, we recommend no changes to the current rates at this time. We will closely monitor this assumption in the next study to see if a reversal in the ordinary disability pattern has occurred.

Similarly, Tables 1 and 2 indicate that for both State and employees of local employers, the accidental disability rates presently in use result in a slightly lower than expected number of actual



accidental disabilities but are well within an acceptable range due to the relatively small incidence of the event. We recommend no change in the rates.

The graphs on pages 35 and 36 show the current, actual and proposed rates for ordinary and accidental disabilities.












RATES OF DEFERRED VESTED, EARLY AND SERVICE RETIREMENT

The Retirement System provides, upon withdrawal after 10 years of service, a deferred retirement allowance commencing at age 60 and, upon withdrawal (or retirement) after 25 years of service, a retirement allowance commencing immediately. Upon retirement, after the attainment of age 60 or after 25 years of service and the attainment of age 55, the retirement allowance payable is unreduced. All such withdrawals and retirements have been considered with vesting and service retirements in the experience.

Tables 1 and 2 show that, overall, actual withdrawals with a deferred benefit or early retirements with a reduced benefit entitlement have been significantly higher than anticipated for both State and employees of local employers. This is inconsistent with the results of the previous study and we recommend no changes to the current rates at this time. We will closely monitor this assumption in the next study to see if a reversal in the termination pattern has occurred.

With respect to service retirements, the experience indicates that, in total, actual retirements were considerably less than those expected both among State employees and employees of local employer groups. This is consistent with the prior study and, once again, could be due to the special Early Retirement Incentive (ERI) programs that were previously offered to eligible members. The ERI programs had a direct effect on the study since some of the retirements expected during the past three years actually occurred during the window period. While we excluded members who elected to retire under the ERI programs from this study, it is possible that some of the members would have retired even if the ERI programs had not been offered. We are



not making a recommendation as to possible rate changes at this time since the actual experience during this examination period is not indicative of the experience that can be expected in the future after the effect of the ERI programs wears off.

CHAPTER 366, P.L. 2001 – PROSECUTORS PART RATES OF SERVICE RETIREMENT

Chapter 366, P.L. 2001 provides benefits similar to those of the Police and Firemen's Retirement System (PFRS) to prosecutor members of the System who are not eligible for enrollment in PFRS. The original costs for Chapter 366 were based primarily on PERS assumptions determined in the June 30, 2002 experience study, except for retirements with 20 to 24 years of service which were based on PFRS rates developed in the June 30, 2001 experience study. Beginning with the June 30, 2005 experience study, we have separately analyzed the retirement pattern of prosecutor members.

Tables 1 and 2 show that, overall, actual retirements for State and local employer members who retire after age 54 with less than 20 years of service are greater than expected. The same trend holds true for members retiring with 20 years of service. However, the overall incidence is small and still within an acceptable range. Therefore, we recommend no changes to either of these rates at this time.

Table 1 shows that the experience for State employed individuals retiring with 21 to 24 years of service is in line with expected and no change to the rates is recommended. Table 2, on the other hand, shows that there were 2 local members who actually retired when no one was expected to retire. However, when compared to the 238 total number of local members exposed to these rates,



the 1% incidence is well within the acceptable range. Therefore, we recommend no changes to these rates at this time.

With respect to the retirement experience for State members with more than 24 years of service, Table 1 indicates that there are considerably more members retiring than expected. Therefore, we recommend increasing the retirement rates used for State members retiring with more than 24 years of service. In contrast, Table 2 shows that the actual retirements among local members are in line with expectations. We recommend no changes to retirement rates for local members retiring with more than 24 years of service.















RATES OF SALARY INCREASE

Tables 3 and 4 indicate that actual salary increases during the past three years were in line with the expected salary increases. Therefore, no change is recommended to the rates of salary increases at this time. The graph on page 47 shows the expected salary increases and the actual salary increases.





RATES OF MORTALITY AMONG BENEFICIARIES

Tables 5 and 6 summarize the mortality experience with respect to members retired on account of service and disability and with respect to dependent beneficiaries in receipt of benefits. The experience varies by age and category. The overall actual experience indicates that the life expectancy for males and females of both State and local service retirees is significantly longer than what is anticipated by the present tables. Since this trend can be expected to continue, we recommend adjustments to the mortality tables adopted in the prior study.

The actual number of deaths for males and females on account of disability indicates that State and local retirees are living longer. Since this trend can be expected to continue, we recommend updating the rates to use recently published mortality tables for disabled lives.

The actual number of deaths for male and female dependents of deceased pensioners and beneficiaries in receipt of active death benefits is also significantly lower than expected and we recommend updating the rates to use recently published mortality tables.

The following graphs show the current rates, the actual rates and the proposed rates of mortality for the System's beneficiaries.









INTEREST RATE ASSUMPTION (DISCOUNT RATE)

As part of the actuarial investigation of the System, the interest rate assumption is analyzed in relation to the current underlying economic conditions.

The interest rate assumption includes two components, inflation and the real rate of return. The following analysis examines each of these components.

Inflation

There are various guides which may be considered when analyzing the inflation component. One well known published index is the U.S. Consumer Price Index (CPI-W). The following chart summarizes the changes in the U.S. Consumer Price Index since January 1, 2005:

CALENDAR YEAR	INCREASE
2005	3.5%
2006	3.2%
2007	2.9%
2008	4.1%

The increases in the CPI rate trend for the longer period 1980-2008 are equivalent to an annual rate of about 3.8%. Therefore an inflation assumption in the range of 3.0% to 4.0% appears reasonable in the long term.



Real Interest Rate

The real rate of return on investments (total rate less the inflation component) is sensitive to the investment strategy adopted by the Division of Investments. For informational purposes, the estimated total rates of return earned by the System, based on both the market and actuarial values of the assets, over the past three years are shown below:

	ESTIMAT OF RE	TED RATE		THEORE RATE (TICAL REAL)F RETURN	CUMU (AN	ULATIVE NUAL)
YEAR ENDING	Market Basis	Actuarial Basis	COST OF LIVING INCREASE*	Market Basis	Actuarial Basis	Market Basis	Actuarial Basis
6/30/2008 6/30/2007 6/30/2006	(1.40)% 15.28% 9.97%	6.83% 7.96% 5.78%	5.55% 2.67% 4.47%	(6.58)% 12.28% 5.26%	1.21% 5.15% 1.25%	3.36% 8.71% 5.26%	2.52% 3.18% 1.25%

NJ-PERS HISTORICAL NOMINAL AND REAL RATE OF RETURN

*Based on the ratio of the CPI-W as of each year's ending date to the prior year amounts.

The following table summarizes certain information derived from the 2008 Ibbotson study of returns on various asset classes. This study is one of the most widely quoted reference works on investment rates of return and uses the period 1926-2008 for source material. The arithmetic and geometric mean rates of return over this period, as well as their associated standard deviations (which measure the expected spread around the arithmetic mean), were computed both in total and in real terms. The figures presented below are in real terms, i.e., net of inflation:



HISTORICAL REAL RATES OF RETURN*
FOR VARIOUS TYPES OF INVESTMENTS

TYPE OF INVESTMENT	ARITHMETIC MEAN	STANDARD DEVIATION	GEOMETRIC MEAN
Common Stocks - Large Cap	8.5%	20.6%	6.4%
Common Stocks - Small Cap	13.0%	32.3%	8.4%
Long-term Government Bonds	3.1%	10.5%	2.6%
Long-term Corporate Bonds	3.2%	9.6%	2.8%
Hedge Funds	7.2%	8.5%	6.9%
U.S. Treasury Bills	0.8%	0.8%	0.7%

*Derived from Ibbotson study for period 1926-2008.

The geometric mean represents the constant annual rate of return which, when earned over the same period, would have produced the same overall results at the end of the period. It is, therefore, the one to consider when attempting to predict the level rate of return for the future.

The real interest rate should be assumed to lie somewhere between 2.6% (the expected real rate on long-term risk-less securities) and 8.4% (the expected real rate on small cap common stocks), depending upon the expected portfolio mix in the System's investment policy.



Based on the System's asset allocation and expected real returns, the real interest rate should range between 4.75% and 5.00%. The following table shows the asset allocation and expected real returns for various asset classes:

	ASSET ALLOCATION	REAL RETURN
Bonds*	26.7%	2.7%
Stocks – Large Cap – Small Cap	46.4% 3.0%	$6.4\% \\ 8.4\%$
Mortgages	0.2%	3.2%
Alternative Investments	12.5%	6.9%
Cash	11.2%	0.7%
Average	100.0%	4.9%

*Analysis assumes that the bond component is split evenly between Government and Corporate bonds.

The above real rate coupled with the inflation assumption of 3.0% to 4.0% discussed previously would produce a nominal interest rate of 8.0% to 9.0%. This analysis supports the continued use of the current interest rate of 8.25%.



IV. PROPOSED NEW ASSUMPTIONS

The experience investigation for the period from July 1, 2005 to June 30, 2008 indicates the need for certain changes in the active service tables and the mortality tables for retired members and dependent beneficiaries. The proposed changes are summarized as follows:

	Propose	ed Changes
Rates	State	Local
Active Service Tables		
• Withdrawal prior to eligibility for a benefit during first year of employment	Increase	Increase
• Withdrawal prior to eligibility for a benefit during second year of employment	Decrease	Decrease
• Withdrawal prior to eligibility for a benefit during third year of employment	Decrease	No Change
• Withdrawal after the first three years of employment (Ultimate withdrawal)	Decrease	Decrease
• Ordinary death	*	*
Accidental death	No Change	No Change
Ordinary disability	No Change	No Change
Accidental disability	No Change	No Change
• Deferred vested and early retirement	No Change	No Change
Service retirement	No Change	No Change
 Chapter 366, P.L. 2001 Age 55 with less than 20 years of service With 20 years of service With 21 to 24 years of service With more than 24 years of service 	No Change No Change Increase	No Change No Change No Change No Change
Salary increase	No Change	No Change



	Proposed	Changes
Rates	Male	Female
Mortality Tables		
• Retired members on account of service	**	**
• Retired members on account of disability	***	***
Beneficiaries of members	**	**

* The proposed change is to adopt the RP-2000 Employee Preretirement morality table for male and female active participants. For State, both male and female mortality tables are set back 1 year. For employees of Local employers, the female mortality table is set back 4 years.

** The proposed change is to adopt the RP-2000 Combined Healthy mortality tables for male and female retired members with the female mortality table set back 1 year.

*** The proposed change is to adopt the RP-2000 Disabled mortality tables for male and female retired members with the male mortality table set back 3 years and female mortality table set back 1 year.



The following tables give a comparison of the present, actual and proposed average rates of separation from active service and average rates of mortality for retirement members at quinquennial ages.



RATES OF SEPARATION FROM ACTIVE SERVICE OF STATE EMPLOYEES

AGE	PRESENT RATES	ACTUAL RATES	PROPOSED RATES
	Select Rate	es of Withdrawal	
	For Members w	ith 0 Years of Servi	ice
20	0.2064	0.1731	0.2890
25	0.2064	0.3189	0.2890
30	0.2064	0.3682	0.2890
35	0.1641	0.2620	0.2133
40	0.1335	0.2186	0.1736
45	0.1257	0.2057	0.1633
50	0.1180	0.2286	0.1633
55	0.1608	0.2215	0.1633
	Select Rate	es of Withdrawal	
	For Members w	ith 1 Year of Servi	ce
20	0.1592	0.0454	0.1353
25	0.1592	0.0917	0.1353
30	0.1592	0.1170	0.1353
35	0.1237	0.0972	0.1113
40	0.0987	0.0799	0.0888
45	0.0918	0.0686	0.0826
50	0.0850	0.0699	0.0765
55	0.1226	0.0686	0.0765
	Select Rate	es of Withdrawal	
	For Members w	ith 2 Years of Servi	ice
20	0.1120	0.0282	0.0952
25	0.1120	0.0594	0.0952
30	0.1120	0.0838	0.0952
35	0.0823	0.0716	0.0823
40	0.0639	0.0681	0.0639
45	0.0579	0.0524	0.0579
50	0.0521	0.0571	0.0521
55	0.0845	0.0482	0.0521





RATES OF SEPARATION FROM ACTIVE SERVICE OF STATE EMPLOYEES

AGE	PRESENT RATES	ACTUAL RATES	PROPOSED RATES
	Ultimate Ra	tes of Withdrawal	
20	0.0850	0.0583	0.0560
25	0.0800	0.0327	0.0560
30	0.0550	0.0397	0.0440
35	0.0350	0.0293	0.0315
40	0.0192	0.0162	0.0173
45	0.0144	0.0110	0.0130
50	0.0112	0.0076	0.0090
55	0.0126	0.0081	0.0088



RATES OF SEPARATION FROM ACTIVE SERVICE OF STATE EMPLOYEES

AGE	PRESENT RATES	ACTUAL RATES	PROPOSED RATES	
	Male Ordinary Death			
20	0.0005	0.0009	0.0003	
25	0.0005	0.0006	0.0004	
30	0.0006	0.0006	0.0004	
35	0.0008	0.0007	0.0007	
40	0.0011	0.0008	0.0010	
45	0.0016	0.0014	0.0014	
50	0.0024	0.0022	0.0020	
55	0.0035	0.0028	0.0028	
60	0.0049	0.0034	0.0045	
65	0.0068	0.0059	0.0070	
	Female C	Ordinary Death		
20	0.0005	0.0006	0.0002	
25	0.0005	0.0003	0.0002	
30	0.0006	0.0002	0.0003	
35	0.0008	0.0005	0.0004	
40	0.0011	0.0006	0.0007	
45	0.0016	0.0009	0.0010	
50	0.0024	0.0016	0.0016	
55	0.0035	0.0027	0.0023	
60	0.0049	0.0032	0.0036	
65	0.0068	0.0057	0.0054	
	Accid	ental Death		
20	0.00001	0.00000	0.00001	
25	0.00001	0.00000	0.00001	
30	0.00001	0.00000	0.00001	
35	0.00001	0.00000	0.00001	
40	0.00001	0.00000	0.00001	
45	0.00001	0.00000	0.00001	
50	0.00001	0.00000	0.00001	
55	0.00001	0.00000	0.00001	
60	0.00001	0.00000	0.00001	
65	0.00001	0.00000	0.00001	



RATES OF SEPARATION FROM ACTIVE SERVICE OF STATE EMPLOYEES

AGE	PRESENT RATES	ACTUAL RATES	PROPOSED RATES
	Ordina	ry Disability	
20	0.00005	0.00000	0.00005
25	0.00008	0.00000	0.00008
30	0.00090	0.00165	0.00090
35	0.00234	0.00253	0.00234
40	0.00347	0.00398	0.00347
45	0.00500	0.00448	0.00500
50	0.00598	0.00505	0.00598
55	0.00874	0.00552	0.00874
60	0.01520	0.00936	0.01520
65	0.01670	0.01381	0.01670
	Accider	ntal Disability	
20	0.00001	0.00000	0.00001
25	0.00001	0.00010	0.00001
30	0.00003	0.00000	0.00003
35	0.00009	0.00011	0.00009
40	0.00015	0.00009	0.00015
45	0.00019	0.00030	0.00019
50	0.00024	0.00032	0.00024
55	0.00032	0.00026	0.00032
60	0.00041	0.00030	0.00041
65	0.00049	0.00025	0.00049



RATES OF SEPARATION FROM ACTIVE SERVICE OF STATE EMPLOYEES

AGE	PRESENT RATES	ACTUAL RATES	PROPOSED RATES
	Withdrawal after	Eligibility for a Ber	nefit
	(Deferred Vested	and Early Retirem	ent)
30	0.0000	0.0000	0.0000
35	0.0005	0.0015	0.0005
40	0.0006	0.0007	0.0006
45	0.0025	0.0037	0.0025
50	0.0070	0.0132	0.0070
55	0.0070	0.0168	0.0070
	Service	e Retirement	
55	0.1540	0.1539	0.1540
56	0.1120	0.1293	0.1120
57	0.1120	0.1330	0.1120
58	0.1120	0.1301	0.1120
59	0.2100	0.1462	0.2100
60	0.0880	0.1116	0.0880
61	0.0880	0.0873	0.0880
62	0.1800	0.1346	0.1800
63	0.1400	0.1051	0.1400
64	0.1500	0.1152	0.1500
65	0.2310	0.1402	0.2310
66	0.1800	0.1338	0.1800
67	0.1500	0.1257	0.1500
68	0.1500	0.1242	0.1500
69	0.1500	0.1067	0.1500



RATES OF SEPARATION FROM ACTIVE SERVICE OF STATE EMPLOYEES (continued)

CHAPTER 366, P.L. 2001 – PROSECUTORS PART

	Age 55 with Less Than 20 Years of Service			With 20 Years of Service		
AGE	PRESENT RATES	ACTUAL RATES	PROPOSED RATES	PRESENT RATES	ACTUAL RATES	PROPOSED RATES
40				0.0200	0.0000	0.0200
45				0.0250	0.0000	0.0250
50				0.0375	0.0000	0.0375
53				0.0500	0.0000	0.0500
54				0.0500	1.0000	0.0500
55	0.0259	0.0000	0.0259	0.0500	0.0000	0.0500
56	0.0259	0.0000	0.0259	0.0500	0.0000	0.0500
57	0.0259	0.0000	0.0259	0.0500	0.0000	0.0500
58	0.0263	0.0000	0.0263	0.0500	0.0000	0.0500
59	0.0263	0.0000	0.0263	0.0500	0.0000	0.0500
60	0.0263	0.0000	0.0263	0.0500	0.0000	0.0500
61	0.0263	0.3333	0.0263	0.0500	0.0000	0.0500
62	0.0263	0.0000	0.0263	0.1500	0.0000	0.1500
63	0.0263	0.0000	0.0263	0.1500	1.0000	0.1500
64	0.0263	0.0000	0.0263	0.3750	0.0000	0.3750
65	0.0263	0.0000	0.0263	0.3750	0.0000	0.3750
66	0.0263	0.0000	0.0263	0.3750	0.0000	0.3750
67	0.0263	0.0000	0.0263	0.3750	1.0000	0.3750
68	0.0263	0.0000	0.0263	0.3750	1.0000	0.3750
69	0.0263	0.0000	0.0263	0.3750	0.0000	0.3750



RATES OF SEPARATION FROM ACTIVE SERVICE OF STATE EMPLOYEES (continued)

CHAPTER 366, P.L. 2001 – PROSECUTORS PART

	With 21 to 24 Years of Service		With More than 24 Years of Service			
AGE	PRESENT RATES	ACTUAL RATES	PROPOSED RATES	PRESENT RATES	ACTUAL RATES	PROPOSED RATES
40	0.0000	0.0000	0.0000	0.1540	0.0000	0.2310
45	0.0000	0.0000	0.0000	0.1540	0.0000	0.2310
50	0.0000	0.0000	0.0000	0.1540	0.3913	0.2310
53	0.0000	0.0000	0.0000	0.1748	0.5000	0.2622
54	0.0000	0.0000	0.0000	0.1748	0.2500	0.2622
55	0.0000	0.0000	0.0000	0.1748	0.5714	0.2622
56	0.0000	0.0000	0.0000	0.1748	0.6000	0.2622
57	0.0000	0.0000	0.0000	0.1748	1.0000	0.2622
58	0.0000	0.0000	0.0000	0.1748	0.5000	0.2622
59	0.0000	0.0000	0.0000	0.2278	0.2000	0.3417
60	0.0000	0.0000	0.0000	0.2278	0.5000	0.3417
61	0.0000	0.0000	0.0000	0.2278	0.2500	0.3417
62	0.0000	0.0000	0.0000	0.2278	0.0000	0.3417
63	0.0000	0.0000	0.0000	0.2278	0.0000	0.3417
64	0.0000	0.0000	0.0000	0.3780	0.5000	0.5670
65	0.0000	0.0000	0.0000	1.0000	1.0000	1.0000
66	0.0000	0.0000	0.0000	1.0000	0.0000	1.0000
67	0.0000	0.0000	0.0000	1.0000	0.0000	1.0000
68	0.0000	0.0000	0.0000	1.0000	0.0000	1.0000
69	0.0000	0.0000	0.0000	1.0000	0.0000	1.0000



RATES OF SEPARATION FROM ACTIVE SERVICE EMPLOYEES OF LOCAL EMPLOYERS

AGE	PRESENT RATES	ACTUAL RATES	PROPOSED RATES		
Select Rates of Withdrawal					
	For Members w	ith 0 Years of Servi	ice		
20	0.2338	0.2246	0.2923		
25	0.2338	0.3362	0.2923		
30	0.2083	0.3465	0.2708		
35	0.1740	0.2722	0.2262		
40	0.1646	0.2583	0.2140		
45	0.1590	0.2465	0.2066		
50	0.1532	0.2588	0.2068		
55	0.1506	0.2499	0.2033		
	Select Rate	es of Withdrawal			
	For Members w	vith 1 Year of Servi	ce		
20	0.1779	0.0742	0.1512		
25	0.1779	0.1414	0.1512		
30	0.1548	0.1429	0.1471		
35	0.1255	0.1128	0.1193		
40	0.1171	0.0974	0.1054		
45	0.1119	0.0928	0.1008		
50	0.1068	0.0928	0.0961		
55	0.1044	0.0912	0.0940		
Select Rates of Withdrawal					
For Members with 2 Years of Service					
20	0.1219	0.0385	0.1219		
25	0.1219	0.1055	0.1219		
30	0.1012	0.1211	0.1012		
35	0.0770	0.0847	0.0770		
40	0.0695	0.0780	0.0695		
45	0.0649	0.0752	0.0649		
50	0.0602	0.0701	0.0602		
55	0.0581	0.0728	0.0581		



RATES OF SEPARATION FROM ACTIVE SERVICE EMPLOYEES OF LOCAL EMPLOYERS

AGE	PRESENT RATES	ACTUAL RATES	PROPOSED RATES			
	Ultimate Rates of Withdrawal					
20	0.1000	0.0231	0.0743			
25	0.0990	0.0536	0.0743			
30	0.0750	0.0548	0.0638			
35	0.0412	0.0355	0.0391			
40	0.0326	0.0256	0.0277			
45	0.0285	0.0222	0.0242			
50	0.0223	0.0174	0.0190			
55	0.0182	0.0143	0.0154			



RATES OF SEPARATION FROM ACTIVE SERVICE EMPLOYEES OF LOCAL EMPLOYERS

AGE	PRESENT RATES	ACTUAL RATES	PROPOSED RATES		
Male Ordinary Death					
20	0.0004	0.0000	0.0004		
25	0.0004	0.0004	0.0004		
30	0.0005	0.0007	0.0005		
35	0.0006	0.0013	0.0008		
40	0.0009	0.0010	0.0011		
45	0.0014	0.0013	0.0015		
50	0.0022	0.0026	0.0022		
55	0.0033	0.0034	0.0031		
60	0.0048	0.0044	0.0049		
65	0.0069	0.0069	0.0076		
	Female C	Ordinary Death			
20	0.0004	0.0005	0.0002		
25	0.0004	0.0001	0.0002		
30	0.0005	0.0003	0.0002		
35	0.0006	0.0004	0.0003		
40	0.0009	0.0005	0.0005		
45	0.0014	0.0007	0.0008		
50	0.0022	0.0012	0.0012		
55	0.0033	0.0017	0.0018		
60	0.0048	0.0026	0.0028		
65	0.0069	0.0038	0.0043		
Accidental Death					
20	0.00001	0.00000	0.00001		
25	0.00001	0.00000	0.00001		
30	0.00001	0.00000	0.00001		
35	0.00001	0.00000	0.00001		
40	0.00001	0.00000	0.00001		
45	0.00001	0.00000	0.00001		
50	0.00001	0.00000	0.00001		
55	0.00001	0.00000	0.00001		
60	0.00001	0.00000	0.00001		
65	0.00001	0.00000	0.00001		



RATES OF SEPARATION FROM ACTIVE SERVICE EMPLOYEES OF LOCAL EMPLOYERS

AGE	PRESENT RATES	ACTUAL RATES	PROPOSED RATES			
	Ordinary Disability					
20	0.00000	0.00000	0.00000			
25	0.00000	0.00000	0.00000			
30	0.00081	0.00059	0.00081			
35	0.00224	0.00206	0.00224			
40	0.00370	0.00354	0.00370			
45	0.00407	0.00428	0.00407			
50	0.00522	0.00514	0.00522			
55	0.00725	0.00579	0.00725			
60	0.00995	0.00802	0.00995			
65	0.01227	0.01153	0.01227			
Accidental Disability						
20	0.00001	0.00000	0.00001			
25	0.00003	0.00000	0.00003			
30	0.00004	0.00000	0.00004			
35	0.00004	0.00008	0.00004			
40	0.00008	0.00011	0.00008			
45	0.00010	0.00011	0.00010			
50	0.00015	0.00009	0.00015			
55	0.00018	0.00020	0.00018			
60	0.00023	0.00014	0.00023			
65	0.00025	0.00017	0.00025			


RATES OF SEPARATION FROM ACTIVE SERVICE EMPLOYEES OF LOCAL EMPLOYERS

(continued)

AGE	PRESENT RATES	ACTUAL RATES	PROPOSED RATES							
	Withdrawal after Eligibility for a Benefit (Deferred Vested and Early Retirement)									
20										
30 25	0.0003	0.0013	0.0003							
35	0.0004	0.0007	0.0004							
40	0.0006	0.0008	0.0006							
45	0.0023	0.0025	0.0023							
50	0.0062	0.0078	0.0062							
55	0.0062	0.0091	0.0062							
	Service	e Retirement								
55	0.1170	0.2106	0.1170							
56	0.1170	0.1124	0.1170							
57	0.1170	0.1151	0.1170							
58	0.1170	0.1148	0.1170							
59	0.2860	0.1300	0.2860							
60	0.0780	0.1019	0.0780							
61	0.0840	0.0779	0.0840							
62	0.1680	0.1183	0.1680							
63	0.1050	0.0988	0.1050							
64	0.1050	0.0913	0.1050							
65	0.2205	0.1392	0.2205							
66	0.1575	0.1289	0.1575							
67	0.1365	0.1153	0.1365							
68	0.1155	0.1027	0.1155							
69	0.1155	0.1094	0.1155							



RATES OF SEPARATION FROM ACTIVE SERVICE OF LOCAL EMPLOYEES (continued)

CHAPTER 366, P.L. 2001 – PROSECUTORS PART

	Age 55 with L	ess Than 20 Ye	ars of Service	With 20 Years of Service			
AGE	PRESENT RATES	ACTUAL RATES	PROPOSED RATES	PRESENT RATES	ACTUAL RATES	PROPOSED RATES	
40				0.0200	0.0000	0.0200	
45				0.0250	0.0208	0.0250	
50				0.0375	0.0625	0.0375	
53				0.0500	0.2000	0.0500	
54				0.0500	0.0000	0.0500	
55	0.0306	0.0000	0.0306	0.0500	0.0000	0.0500	
56	0.0306	0.0000	0.0306	0.0500	0.0000	0.0500	
57	0.0306	0.0909	0.0306	0.0500	0.0000	0.0500	
58	0.0306	0.0000	0.0306	0.0500	0.3333	0.0500	
59	0.0306	0.0000	0.0306	0.0500	0.0000	0.0500	
60	0.0306	0.0000	0.0306	0.0500	1.0000	0.0500	
61	0.0306	0.2500	0.0306	0.0500	0.3333	0.0500	
62	0.0306	0.0000	0.0306	0.1500	0.0000	0.1500	
63	0.0306	0.2500	0.0306	0.1500	0.0000	0.1500	
64	0.0306	0.0000	0.0306	0.3750	1.0000	0.3750	
65	0.0306	0.5000	0.0306	0.3750	1.0000	0.3750	
66	0.0306	0.0000	0.0306	0.3750	0.0000	0.3750	
67	0.0306	0.0000	0.0306	0.3750	0.0000	0.3750	
68	0.0306	0.0000	0.0306	0.3750	0.0000	0.3750	
69	0.0306	0.0000	0.0306	0.3750	0.0000	0.3750	





RATES OF SEPARATION FROM ACTIVE SERVICE OF LOCAL EMPLOYEES (continued)

CHAPTER 366, P.L. 2001 – PROSECUTORS PART

	With 21	to 24 Years of	Service	With More than 24 Years of Service			
AGE	PRESENT RATES	ACTUAL RATES	PROPOSED RATES	PRESENT RATES	ACTUAL RATES	PROPOSED RATES	
40	0.0000	0.0000	0.0000	0.1540	0.0000	0.1540	
45	0.0000	0.0000	0.0000	0.1540	0.0000	0.1540	
50	0.0000	0.0000	0.0000	0.1540	0.2143	0.1540	
53	0.0000	0.0000	0.0000	0.1748	0.1000	0.1748	
54	0.0000	0.0000	0.0000	0.1748	0.2000	0.1748	
55	0.0000	0.0000	0.0000	0.1748	0.2857	0.1748	
56	0.0000	0.0000	0.0000	0.1748	0.2857	0.1748	
57	0.0000	0.0000	0.0000	0.1748	0.3750	0.1748	
58	0.0000	0.0000	0.0000	0.1748	0.2778	0.1748	
59	0.0000	0.0000	0.0000	0.2278	0.2308	0.2278	
60	0.0000	0.0000	0.0000	0.2278	0.4615	0.2278	
61	0.0000	0.0000	0.0000	0.2278	0.0000	0.2278	
62	0.0000	0.0000	0.0000	0.2278	0.2857	0.2278	
63	0.0000	0.0000	0.0000	0.2278	0.5714	0.2278	
64	0.0000	0.0000	0.0000	0.3780	0.0000	0.3780	
65	0.0000	1.0000	0.0000	1.0000	0.2500	1.0000	
66	0.0000	0.0000	0.0000	1.0000	0.6667	1.0000	
67	0.0000	0.0000	0.0000	1.0000	0.5000	1.0000	
68	0.0000	0.0000	0.0000	1.0000	0.0000	1.0000	
69	0.0000	1.0000	0.0000	1.0000	0.0000	1.0000	





COMPARISON OF ACTUAL AND EXPECTED SALARY INCREASES

STATE

AGE	CURRENT RATES	ACTUAL RATES	PROPOSED RATES
20	6.63%	11.21%	6.63%
25	6.40%	9.85%	6.40%
30	6.15%	8.55%	6.15%
35	5.90%	7.62%	5.90%
40	5.65%	6.81%	5.65%
45	5.40%	6.27%	5.40%
50	5.15%	5.87%	5.15%
55	4.90%	5.69%	4.90%
60	4.62%	5.60%	4.62%
65	4.21%	5.52%	4.21%

LOCAL EMPLOYERS

AGE	CURRENT RATES	ACTUAL RATES	PROPOSED RATES
20	6.63%	11.38%	6.63%
25	6.40%	8.87%	6.40%
30	6.15%	7.25%	6.15%
35	5.90%	6.58%	5.90%
40	5.65%	6.36%	5.65%
45	5.40%	6.06%	5.40%
50	5.15%	5.68%	5.15%
55	4.90%	5.25%	4.90%
60	4.62%	4.97%	4.62%
65	4.21%	4.74%	4.21%





RATES OF MORTALITY FOR RETIRED MEMBERS ON ACCOUNT OF SERVICE

	Ν	ALE			FEMALE	C
	Present	Actual	Proposed	Present	Actual	Proposed
Age	Rate	Rate	Rate	Rate	Rate	Rate
45	0.00162	0.01136	0.00151	0.00113	0.00000	0.00103
50	0.00244	0.00894	0.00222	0.00171	0.00084	0.00157
55	0.00420	0.00796	0.00373	0.00278	0.00661	0.00249
60	0.00783	0.01019	0.00688	0.00518	0.00622	0.00454
65	0.01448	0.01537	0.01290	0.00982	0.00719	0.00872
70	0.02485	0.02586	0.02235	0.01686	0.01325	0.01516
75	0.04259	0.03838	0.03824	0.02832	0.02394	0.02563
80	0.07291	0.06108	0.06539	0.04641	0.03693	0.04197
85	0.12399	0.09849	0.11182	0.07844	0.05989	0.07043
90	0.19997	0.15763	0.18336	0.13207	0.11283	0.11981
95	0.28345	0.24736	0.26712	0.19367	0.19679	0.18215

STATE AND LOCAL EMPLOYEES COMBINED (continued)



RATES OF MORTALITY FOR RETIRED MEMBERS ON ACCOUNT OF DISABILITY

				.		
	Ν	AALE			FEMALE	C
	Present	Actual	Proposed	Present	Actual	Proposed
Age	Rate	Rate	Rate	Rate	Rate	Rate
45	0.02950	0.01633	0.02257	0.02225	0.01157	0.00760
50	0.03303	0.02771	0.02513	0.02633	0.01766	0.01067
55	0.04060	0.03255	0.03156	0.02972	0.01892	0.01551
60	0.04603	0.03238	0.03804	0.03021	0.02325	0.02078
65	0.06063	0.04030	0.04508	0.03649	0.03090	0.02672
70	0.07125	0.05814	0.05467	0.04778	0.04521	0.03553
75	0.07718	0.07395	0.06973	0.05945	0.05000	0.04911
80	0.10508	0.08525	0.09244	0.08429	0.05301	0.06806
85	0.14730	0.12850	0.12201	0.14067	0.12437	0.09425
90	0.18634	0.13514	0.15532	0.20613	0.08485	0.13154
95	0.26434	0.07692	0.21683	0.30114	0.25000	0.18261

STATE AND LOCAL EMPLOYEES COMBINED (continued)



RATES OF MORTALITY FOR ALL BENEFICIARIES OF DECEASED MEMBERS

	Ν	ALE			FEMALE	2
	Present	Actual	Proposed	Present	Actual	Proposed
Age	Rate	Rate	Rate	Rate	Rate	Rate
45	0.00290	0.00350	0.00151	0.00140	0.00359	0.00103
50	0.00459	0.00548	0.00222	0.00207	0.00159	0.00157
55	0.00723	0.00398	0.00373	0.00340	0.00618	0.00249
60	0.01213	0.01382	0.00688	0.00579	0.01028	0.00454
65	0.02075	0.01340	0.01290	0.01002	0.01629	0.00872
70	0.03416	0.01306	0.02235	0.01758	0.01593	0.01516
75	0.05384	0.02191	0.03824	0.03007	0.02501	0.02563
80	0.08362	0.06816	0.06539	0.04939	0.04354	0.04197
85	0.12536	0.09607	0.11182	0.08680	0.06314	0.07043
90	0.17517	0.16304	0.18336	0.13502	0.11326	0.11981
95	0.22711	0.17391	0.26712	0.20835	0.19437	0.18215

STATE AND LOCAL EMPLOYEES COMBINED (continued)



V. COST IMPACT OF THE PROPOSED ASSUMPTIONS

The overall effect of the proposed changes in assumptions would be to increase the normal cost and accrued liability obligation for both State and local employers. The following chart presents a summary of the liabilities and contributions under the current and proposed assumptions using the July 1, 2008 valuation results:

	Sta	ate	Local E	mployers
	Current	Proposed	Current	Proposed
Actuarial Accrued Liability Additional Accrued Liability Unfunded Accrued Liability/(Surplus)	\$ 17,072,702,680\$ 5,820,381,074	\$ 17,701,122,185 \$ 628,419,505 \$ 6,448,800,579	\$ 23,173,183,973 \$ 4,921,983,562	\$ 24,032,427,379 \$ 859,243,406 \$ 5,781,226,968
Required Contribution:				
 Normal Cost (i) Basic/COLA (ii) Chapters 133, 259 and 366 Accrued Liability Payment (i) Basic/COLA (ii) Chapters 259 and 366 (iii) ERI Contributions Total Legislation Offsets 	\$ 182,517,184 40,114,791 352,590,013 1,051,911 N/A 4,167,070	\$ 201,875,066 42,810,012 390,844,877 1,051,911 N/A 4,182,792	 \$ 247,913,268 61,059,548 318,539,722 2,915,393 11,824,046 (63,974,941) 	 \$ 276,019,714 64,685,137 371,149,224 2,915,393 11,824,046 (67,600,530)
 Total Contributions 	\$ 580,440,969	\$ 640,764,658	\$ 578,277,036	\$ 658,992,984
Additional Annual Contribution*		\$ 60,323,689		\$ 80,715,948

*The "true" additional annual cost (excluding reductions for Legislation Offsets) is \$60,307,967 for State and \$84,341,537 for local employers.

The calculations were based on the same data, actuarial methods and assumptions, including an 8.25% interest rate, as were used in the July 1, 2008 valuation with the exception of these proposed changes.

If the Board approves of these recommendations, the attached resolutions may be used in adopting the tables.



VI. RESOLUTIONS PROVIDING FOR ADOPTION OF SERVICE AND MORTALITY TABLES FOR THE PUBLIC EMPLOYEES' RETIREMENT SYSTEM OF NEW JERSEY

WHEREAS, the investigation of the experience of members and beneficiaries of the Public Employees' Retirement System which was prepared as of June 30, 2008 indicated that the active service tables previously adopted by the Board required modification in order that they reflect more closely the actual past experience of the membership, and

WHEREAS, The actuary has prepared new tables, which he recommends for adoption, therefore be it

RESOLVED, That in accordance with Section 19 of Chapter 15A of the New Jersey Statutes, and on the basis of the recommendations of the actuary, the Board of Trustees hereby approves for use the attached active service tables for use in calculating the employers' rates of contribution and in valuing the liabilities on account of both active and retired members on and after July 1, 2009, and be it further

RESOLVED, That any resolutions heretofore adopted by the Board of Trustees with respect to mortality and service tables not inconsistent with the resolutions herein presented be continued in full force and effect.



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TABLE 1

	SELECT RATES OF WITHDRAWAL – STATE EMPLOYEES		DRAWAL – EES	SELECT RATES OF WITHDRAWAL – LOCAL EMPLOYEES		
AGE	1st Year	2nd Year	3rd Year	1st Year	2nd Year	3rd Year
20	0.28899	0.13532	0.09522	0.29229	0.15122	0.12193
21	0.28899	0.13532	0.09522	0.29229	0.15122	0.12193
22	0.28899	0.13532	0.09522	0.29229	0.15122	0.12193
23	0.28899	0.13532	0.09522	0.29229	0.15122	0.12193
24	0.28899	0.13532	0.09522	0.29229	0.15122	0.12193
25	0.28899	0.13532	0.09522	0.29229	0.15122	0.12193
26	0.28899	0.13532	0.09522	0.29229	0.15122	0.12193
27	0.28899	0.13532	0.09522	0.29229	0.15122	0.12193
28	0.28899	0.13532	0.09522	0.28590	0.15705	0.11067
29	0.28899	0.13532	0.09522	0.27804	0.15187	0.10578
30	0.28899	0.13532	0.09522	0.27019	0.14667	0.10089
31	0.28899	0.13532	0.09522	0.26333	0.14214	0.09662
32	0.28899	0.13532	0.09522	0.25645	0.13759	0.09223
33	0.22876	0.12026	0.09132	0.23644	0.12605	0.08341
34	0.21893	0.11671	0.08560	0.22993	0.12174	0.07936
35	0.20911	0.10831	0.07988	0.22342	0.11744	0.07530
36	0.20626	0.10658	0.07822	0.22147	0.11616	0.07409
37	0.20341	0.10486	0.07657	0.21953	0.11486	0.07288
38	0.17830	0.09167	0.06659	0.21757	0.10760	0.07167
39	0.17577	0.09014	0.06513	0.21563	0.10638	0.07045
40	0.17324	0.08861	0.06366	0.21368	0.10516	0.06924
41	0.17128	0.08741	0.06251	0.21230	0.10429	0.06837
42	0.16933	0.08622	0.06137	0.21090	0.10342	0.06752
43	0.16330	0.08502	0.06023	0.20952	0.10256	0.06665
44	0.16330	0.08383	0.05909	0.20814	0.10169	0.06579
45	0.16330	0.08264	0.05794	0.20675	0.10082	0.06493
46	0.16330	0.08136	0.05672	0.20517	0.09983	0.06394
47	0.16330	0.08008	0.05550	0.20358	0.09883	0.06295
48	0.16330	0.07654	0.05210	0.20976	0.09783	0.06196
49	0.16330	0.07654	0.05210	0.20810	0.09684	0.06097
50	0.16330	0.07654	0.05210	0.20646	0.09584	0.05998
51	0.16330	0.07654	0.05210	0.20544	0.09523	0.05937
52	0.16330	0.07654	0.05210	0.20443	0.09463	0.05876
53	0.16330	0.07654	0.05210	0.20332	0.09395	0.05816
54	0.16330	0.07654	0.05210	0.20332	0.09395	0.05756
55	0.16330	0.07654	0.05210	0.20332	0.09395	0.05694
56	0.16330	0.07654	0.05210	0.20332	0.09395	0.05826
57	0.16330	0.07654	0.05210	0.20332	0.09395	0.05958
58	0.16330	0.07654	0.05210	0.20332	0.09395	0.06090
59	0.16330	0.07654	0.05210	0.20332	0.09395	0.06222

ACTIVE SERVICE AND RETIREMENT TABLES



ACTIVE SERVICE AND RETIREMENT TABLES (CONTINUED)

	RATES OF:									
		Ultimate	Withdrawal		Death					
			After Eligibi	lity for Benefit*						
	Before Eligibility for Benefit		(Vested 7	ermination)		Ordi	nary		Accid	ental
AGE	State	Local	State	Local	Sta	ite	Local		State	Local
	Employees	Employees	Employees	Employees	Males	Females	Males	Females	Employees	Employees
20	0.05600	0.07425			0.00033	0.00019	0.00034	0.00018	0.00001	0.00001
21	0.05600	0.07425			0.00034	0.00019	0.00036	0.00018	0.00001	0.00001
22	0.05600	0.07425			0.00036	0.00019	0.00037	0.00019	0.00001	0.00001
23	0.05864	0.07425			0.00037	0.00019	0.00037	0.00019	0.00001	0.00001
24	0.05864	0.07425			0.00037	0.00020	0.00038	0.00019	0.00001	0.00001
25	0.05864	0.07425			0.00038	0.00020	0.00038	0.00019	0.00001	0.00001
26	0.05424	0.07425			0.00038	0.00021	0.00038	0.00019	0.00001	0.00001
27	0.04985	0.07425			0.00038	0.00021	0.00038	0.00020	0.00001	0.00001
28	0.05263	0.06938			0.00038	0.00022	0.00039	0.00020	0.00001	0.00001
29	0.04754	0.06682	0.00000	0.00020	0.00039	0.00024	0.00041	0.00021	0.00001	0.00001
30	0.04245	0.06427	0.00000	0.00030	0.00041	0.00025	0.00044	0.00021	0.00001	0.00001
31	0.03995	0.06084	0.00000	0.00030	0.00044	0.00026	0.00050	0.00022	0.00001	0.00001
32	0.03746	0.05742	0.00000	0.00031	0.00050	0.00031	0.00056	0.00024	0.00001	0.00001
24	0.03500	0.04345	0.00040	0.00038	0.00056	0.00035	0.00063	0.00025	0.00001	0.00001
25	0.03250	0.04070	0.00044	0.00039	0.00063	0.00039	0.00070	0.00026	0.00001	0.00001
26	0.03000	0.03793	0.00048	0.00039	0.00070	0.00043	0.00077	0.00031	0.00001	0.00001
30	0.03000	0.03718	0.00048	0.00041	0.00077	0.00047	0.00084	0.00033	0.00001	0.00001
30	0.03000	0.03042	0.00048	0.00043	0.00084	0.00051	0.00090	0.00039	0.00001	0.00001
30	0.01799	0.02832	0.00053	0.00050	0.00090	0.00055	0.00090	0.00043	0.00001	0.00001
40	0.01799	0.02332	0.00053	0.00055	0.00090	0.00065	0.00102	0.00047	0.00001	0.00001
41	0.01679	0.02707	0.00055	0.00058	0.00102	0.00003	0.00114	0.00051	0.00001	0.00001
42	0.01561	0.02645	0.00057	0.00050	0.00114	0.00077	0.00121	0.00060	0.00001	0.00001
43	0.01467	0.02583	0.00167	0.00170	0.00121	0.00085	0.00130	0.00065	0.00001	0.00001
44	0.01345	0.02521	0.00176	0.00179	0.00130	0.00094	0.00140	0.00071	0.00001	0.00001
45	0.01223	0.02459	0.00185	0.00187	0.00140	0.00103	0.00151	0.00077	0.00001	0.00001
46	0.01223	0.02336	0.00297	0.00266	0.00151	0.00112	0.00162	0.00085	0.00001	0.00001
47	0.01223	0.02213	0.00409	0.00345	0.00162	0.00122	0.00173	0.00094	0.00001	0.00001
48	0.00896	0.02090	0.00700	0.00454	0.00173	0.00133	0.00186	0.00103	0.00001	0.00001
49	0.00896	0.01967	0.00700	0.00539	0.00186	0.00143	0.00200	0.00112	0.00001	0.00001
50	0.00896	0.01845	0.00700	0.00623	0.00200	0.00155	0.00214	0.00122	0.00001	0.00001
51	0.00896	0.01811	0.00700	0.00699	0.00214	0.00168	0.00229	0.00133	0.00001	0.00001
52	0.00896	0.01777	0.00700	0.00774	0.00229	0.00181	0.00245	0.00143	0.00001	0.00001
53	0.00882	0.01585	0.00700	0.00620	0.00245	0.00197	0.00262	0.00155	0.00001	0.00001
54	0.00882	0.01524	0.00700	0.00620	0.00262	0.00213	0.00281	0.00168	0.00001	0.00001
55	0.00882	0.01524	0.00700	0.00620	0.00281	0.00232	0.00303	0.00181	0.00001	0.00001
56	0.00882	0.01524	0.00700	0.00620	0.00303	0.00253	0.00331	0.00197	0.00001	0.00001
57	0.00882	0.01524	0.00700	0.00620	0.00331	0.00276	0.00363	0.00213	0.00001	0.00001
58	0.00882	0.01524	0.00700	0.00620	0.00363	0.00301	0.00400	0.00232	0.00001	0.00001
59	0.00882	0.01524	0.00700	0.00620	0.00400	0.00329	0.00441	0.00253	0.00001	0.00001
60					0.00441	0.00360	0.00488	0.00276	0.00001	0.00001
61					0.00488	0.00393	0.00538	0.00301	0.00001	0.00001
62 62					0.00538	0.00428	0.00592	0.00329	0.00001	0.00001
63					0.00592	0.00466	0.00647	0.00360	0.00001	0.00001
64					0.00647	0.00504	0.00757	0.00393	0.00001	0.00001
03 66					0.00703	0.00543	0.00/5/	0.00428	0.00001	0.00001
67					0.00737	0.00382	0.00840	0.00400	0.00001	0.00001
68					0.00810	0.00021	0.00800	0.00504	0.00001	0.00001
69					0.000007	0.00038	0.00907	0.00545	0.00001	0.00001
. 07	L	1			0.00707	0.00075	0.00751	0.00502	0.00001	0.00001

* The sum of the rates of withdrawal after eligibility for a benefit and those prior to eligibility are the rates assumed for members withdrawing with a benefit.



ACTIVE SERVICE AND RETIREMENT TABLES (CONTINUED)

DISABILITY Service Retirement AGE State Local State Local State Local 20 0.00005 0.00000 0.00001 0.00001 0.00001 Employees		RATES OF:							
Ordinary Accidental Service Retirement AGE State Local State Local Employees		DISABILITY							
AGE State Local State Employees Employees		Ordi	inary	Acci	dental	Service R	etirement		
Employees Employees Employees Employees Employees 20 0.00005 0.00000 0.00001 0.00001 21 0.00005 0.00000 0.00001 0.00001 23 0.00006 0.00000 0.00001 0.00002 24 0.00006 0.00000 0.00001 0.00002 25 0.00006 0.00000 0.00001 0.00002 26 0.00067 0.00001 0.00002 0.00004 29 0.00081 0.00071 0.00003 0.00004 30 0.00097 0.00011 0.00004 0.00004 32 0.00106 0.00111 0.00004 0.00004 33 0.00120 0.00097 0.00007 0.00004 34 0.00279 0.00222 0.00009 0.00004 35 0.00240 0.00256 0.00014 0.00008 41 0.00373 0.00391 0.00015 0.00008 42 0.00408 0.00392	AGE	State	Local	State	Local	State	Local		
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		Employees	Employees	Employees	Employees	Employees	Employees		
21 0.00005 0.00000 0.00001 0.00001 22 0.00005 0.00000 0.00001 0.00002 24 0.00006 0.00000 0.00001 0.00002 25 0.00006 0.00000 0.00001 0.00002 26 0.00006 0.00001 0.00003 0.00004 28 0.00067 0.0003 0.00004 0.00004 30 0.00071 0.00003 0.00004 0.00004 31 0.00106 0.00131 0.00004 0.00004 32 0.00166 0.00131 0.00004 0.00004 33 0.00120 0.00222 0.00004 0.00014 34 0.00260 0.00226 0.00004 0.00014 35 0.00240 0.00222 0.00008 0.00014 36 0.00299 0.00323 0.00011 0.00008 41 0.00338 0.00391 0.00016 0.00010 44 0.00443 0.00392 0.00017<	20	0.00005	0.00000	0.00001	0.00001				
22 0.00005 0.00000 0.00001 0.00001 23 0.00006 0.00000 0.00001 0.00002 25 0.00006 0.00000 0.00001 0.00002 26 0.00006 0.00000 0.00001 0.00003 27 0.00013 0.00007 0.00004 0.00004 28 0.00067 0.00011 0.00004 0.00004 30 0.00097 0.00011 0.00004 0.00004 31 0.0012 0.00110 0.00004 0.00004 33 0.00180 0.00122 0.00008 0.00004 34 0.00210 0.00225 0.00001 0.00004 35 0.00240 0.00225 0.00011 0.00008 36 0.00250 0.00233 0.00017 0.00008 37 0.00338 0.00318 0.00016 0.00008 41 0.00373 0.00391 0.00017 0.00008 42 0.00448 0.00393 0.00014<	21	0.00005	0.00000	0.00001	0.00001				
23 0.00006 0.00000 0.00001 0.00002 24 0.00006 0.00000 0.00001 0.00002 25 0.00006 0.00001 0.00002 26 0.00007 0.00003 0.00004 28 0.00067 0.00003 0.00004 29 0.00081 0.00007 0.00003 0.00004 30 0.0007 0.00003 0.00004 0.00004 31 0.0012 0.00011 0.00004 0.00004 33 0.00210 0.00122 0.00008 0.00004 34 0.00210 0.00122 0.00008 0.00004 35 0.00240 0.00222 0.00008 0.00004 36 0.00259 0.00015 0.00008 0.00016 37 0.00279 0.00232 0.00017 0.00008 41 0.00338 0.00392 0.00017 0.00008 42 0.00443 0.00392 0.00010 0.00010 44	22	0.00005	0.00000	0.00001	0.00001				
24 0.00006 0.00000 0.00001 0.00002 25 0.00006 0.00000 0.00001 0.00003 27 0.00013 0.00000 0.00004 0.00004 28 0.00067 0.00043 0.00004 0.00004 30 0.00071 0.00003 0.00004 0.00004 31 0.0012 0.0011 0.00007 0.00004 33 0.00180 0.00162 0.00004 0.00004 34 0.00210 0.00122 0.00008 0.00004 35 0.00240 0.00025 0.00004 0.00004 36 0.00250 0.00256 0.00011 0.00006 38 0.00250 0.00256 0.00015 0.00008 40 0.00333 0.00033 0.00008 0.0011 42 0.00448 0.00392 0.00017 0.00008 43 0.00433 0.00392 0.00017 0.00008 44 0.0048 0.00027 0.00014 <td>23</td> <td>0.00006</td> <td>0.00000</td> <td>0.00001</td> <td>0.00002</td> <td></td> <td></td>	23	0.00006	0.00000	0.00001	0.00002				
25 0.00006 0.00000 0.00001 0.00002 26 0.00009 0.00000 0.00002 0.00004 27 0.00013 0.00000 0.00004 0.00004 28 0.00067 0.00003 0.00004 0.00004 30 0.00097 0.00001 0.00004 0.00004 31 0.00102 0.00111 0.00005 0.00004 33 0.00180 0.00122 0.00008 0.00004 34 0.00210 0.00122 0.00009 0.00004 36 0.00260 0.00225 0.00010 0.00004 37 0.00279 0.00289 0.00011 0.00008 40 0.00338 0.00392 0.00017 0.00008 41 0.00443 0.00392 0.00017 0.00008 42 0.00468 0.00392 0.00011 0.00016 44 0.00471 0.00021 0.00011 0.0014 45 0.00551 0.00464 0.00021<	24	0.00006	0.00000	0.00001	0.00002				
26 0.00009 0.00000 0.00001 0.00003 27 0.00013 0.00000 0.00002 0.00004 28 0.00081 0.00057 0.00003 0.00004 30 0.00097 0.00011 0.00004 0.00004 31 0.00160 0.00111 0.00004 0.00004 32 0.00160 0.00122 0.00008 0.00004 34 0.00210 0.00122 0.00008 0.00004 35 0.00240 0.00225 0.00011 0.00006 36 0.00299 0.00256 0.00011 0.00006 37 0.00318 0.00356 0.00015 0.00008 40 0.00338 0.00310 0.00016 0.00008 41 0.00373 0.00391 0.00017 0.00009 44 0.00443 0.00392 0.00017 0.00010 45 0.00513 0.00321 0.00011 0.00014 46 0.00545 0.00022 0.00014	25	0.00006	0.00000	0.00001	0.00002				
27 0.00013 0.00000 0.00002 0.00004 28 0.00067 0.00013 0.00003 0.00004 30 0.00097 0.00011 0.00003 0.00004 31 0.00102 0.00111 0.00005 0.00004 32 0.00106 0.00112 0.00005 0.00004 33 0.00120 0.00192 0.00004 0.00004 34 0.00210 0.00252 0.00009 0.00004 36 0.00260 0.00222 0.00009 0.00004 37 0.00279 0.00289 0.0011 0.00008 40 0.00338 0.00391 0.00015 0.00008 41 0.00373 0.00391 0.00016 0.00008 43 0.00443 0.00392 0.0017 0.00008 44 0.00516 0.00017 0.00010 44 0.00526 0.00417 0.00012 45 0.00544 0.00022 0.00011 46	26	0.00009	0.00000	0.00001	0.00003				
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31 0.00102 0.00101 0.00004 0.00004 32 0.00180 0.00131 0.00005 0.00004 33 0.00180 0.00162 0.00007 0.00004 34 0.00210 0.00122 0.00008 0.00004 35 0.00240 0.00226 0.00009 0.00004 36 0.00260 0.00256 0.00011 0.00006 38 0.00299 0.00232 0.00013 0.00008 40 0.00338 0.00390 0.00015 0.00008 41 0.00373 0.00390 0.00017 0.00008 42 0.00408 0.00392 0.00017 0.00009 44 0.00478 0.00393 0.00018 0.00010 45 0.00513 0.00394 0.00012 0.00012 48 0.00551 0.00023 0.00014 0.0012 50 0.00577 0.00510 0.00023 0.00014 51 0.00625 0.00032 0.00016<	30	0.00097	0.00071	0.00003	0.00004				
32 0.00106 0.00131 0.00005 0.00004 33 0.00180 0.00162 0.00007 0.00004 34 0.00210 0.00122 0.00008 0.00004 35 0.00240 0.00222 0.00009 0.00004 36 0.00279 0.00289 0.0011 0.00006 37 0.00279 0.00332 0.00013 0.00008 40 0.00338 0.00390 0.00015 0.00008 41 0.00373 0.00392 0.00017 0.00008 43 0.00448 0.00392 0.00017 0.00008 43 0.00448 0.00021 0.00010 44 45 0.00539 0.0014 0.00011 44 46 0.00551 0.00447 0.00021 0.00014 44 47 0.00539 0.00018 0.00014 45 0.00577 0.00510 0.00027 0.00014 45 48 0.00577 0.00596 0.00027 <t< td=""><td>31</td><td>0.00102</td><td>0.00101</td><td>0.00004</td><td>0.00004</td><td></td><td></td></t<>	31	0.00102	0.00101	0.00004	0.00004				
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	32	0.00106	0.00131	0.00005	0.00004				
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	33	0.00180	0.00162	0.00007	0.00004				
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	34	0.00210	0.00192	0.00008	0.00004				
36 0.00256 0.00256 0.00010 0.00004 37 0.00279 0.00289 0.0011 0.00006 38 0.00299 0.00323 0.00013 0.00008 39 0.00318 0.00356 0.00014 0.00008 40 0.00338 0.00390 0.00015 0.00008 41 0.00373 0.00391 0.00016 0.00008 41 0.00443 0.00392 0.00017 0.00008 43 0.00443 0.00392 0.00017 0.00009 44 0.00478 0.00393 0.00010 0.00010 45 0.00513 0.00394 0.00019 0.00011 46 0.00526 0.00417 0.00021 0.00011 47 0.00539 0.00447 0.00022 0.00014 50 0.00577 0.00510 0.00022 0.00014 51 0.00625 0.00053 0.00027 0.00016 53 0.00771 0.00750 0.00028 0.00016 54 0.00771 0.00750 0.00034 0.00019 0.11700 56 0.00959 0.00750 0.00034 0.00021 0.11200 0.11700 58 0.01344 0.00045 0.00022 0.21000 0.28600 60 0.01590 0.00980 0.00023 0.08800 0.08400 61 0.01626 0.01037 0.00043 0.00022 0.21000 59 0.01462 0.00137 </td <td>35</td> <td>0.00240</td> <td>0.00222</td> <td>0.00009</td> <td>0.00004</td> <td></td> <td></td>	35	0.00240	0.00222	0.00009	0.00004				
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	36	0.00260	0.00256	0.00010	0.00004				
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	37	0.00279	0.00289	0.00011	0.00006				
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	38	0.00299	0.00323	0.00013	0.00008				
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	39	0.00318	0.00356	0.00014	0.00008				
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	40	0.00338	0.00390	0.00014	0.00008				
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	40	0.00373	0.00391	0.00015	0.00008				
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	42	0.00408	0.00392	0.00017	0.00008				
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	43	0.00403	0.00392	0.00017	0.00009				
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	43	0.00443	0.00392	0.00017	0.00009				
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	45	0.00513	0.00393	0.00010	0.00010				
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	45	0.00515	0.00394	0.00019	0.00010				
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	40	0.00520	0.00417	0.00020	0.00011				
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	47	0.00551	0.00440	0.00021	0.00012				
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	40	0.00564	0.00404	0.00021	0.00014				
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	49 50	0.00577	0.00487	0.00022	0.00014				
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	51	0.00577	0.00510	0.00025	0.00014				
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	52	0.00674	0.00596	0.00023	0.00015				
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	53	0.00074	0.00590	0.00027	0.00010				
54 0.00771 0.00713 0.00030 0.00017 55 0.00819 0.00768 0.00032 0.00018 0.15400 0.11700 56 0.00959 0.00750 0.00034 0.00019 0.11200 0.11700 57 0.01099 0.00729 0.00036 0.00020 0.11200 0.11700 58 0.01334 0.00885 0.00037 0.00021 0.11200 0.11700 59 0.01462 0.00980 0.00039 0.00022 0.21000 0.28600 60 0.01590 0.00992 0.00041 0.00023 0.08800 0.07800 61 0.01602 0.01037 0.00043 0.00025 0.18000 0.16800 62 0.01613 0.01083 0.00045 0.00025 0.18000 0.16800 63 0.01600 0.01128 0.00046 0.0025 0.14000 0.10500 64 0.01626 0.01174 0.00050 0.0025 0.18000 0.15800	54	0.00722	0.00005	0.00028	0.00010				
53 0.00819 0.00708 0.00032 0.00018 0.13400 0.11700 56 0.00959 0.00750 0.00034 0.00019 0.11200 0.11700 57 0.01099 0.00729 0.00036 0.00020 0.11200 0.11700 58 0.01334 0.00885 0.00037 0.00021 0.11200 0.11700 59 0.01462 0.00990 0.00039 0.00022 0.21000 0.28600 60 0.01590 0.00992 0.00041 0.00023 0.08800 0.07800 61 0.01602 0.01037 0.00043 0.00025 0.18000 0.16800 62 0.01613 0.01083 0.00045 0.00025 0.18000 0.16800 63 0.01600 0.01128 0.00046 0.0025 0.14000 0.10500 64 0.01626 0.01174 0.00050 0.0025 0.18000 0.15800 65 0.01686 0.01277 0.00051 0.00025 0.18000	55	0.00771	0.00713	0.00030	0.00017	0.15400	0 11700		
50 0.00339 0.00130 0.00034 0.00013 0.11200 0.11700 57 0.01099 0.00729 0.00036 0.00020 0.11200 0.11700 58 0.01334 0.00885 0.00037 0.00021 0.11200 0.11700 59 0.01462 0.00980 0.00039 0.00022 0.21000 0.28600 60 0.01590 0.00992 0.00041 0.00023 0.08800 0.07800 61 0.01602 0.01037 0.00043 0.00025 0.18000 0.16800 62 0.01613 0.01083 0.00045 0.00025 0.18000 0.16800 63 0.01600 0.01128 0.00046 0.0025 0.14000 0.10500 64 0.01626 0.01174 0.00048 0.00025 0.23100 0.22100 65 0.01686 0.01277 0.00051 0.00025 0.18000 0.15800 67 0.01786 0.01335 0.00051 0.00025 0.15000	56	0.00819	0.00708	0.00032	0.00018	0.13400	0.11700		
57 0.01039 0.00125 0.00030 0.00020 0.11200 0.11700 58 0.01334 0.00885 0.00037 0.00021 0.11200 0.11700 59 0.01462 0.00980 0.00039 0.00022 0.21000 0.28600 60 0.01590 0.00992 0.00041 0.00023 0.08800 0.07800 61 0.01602 0.01037 0.00043 0.00023 0.08800 0.08400 62 0.01613 0.01083 0.00045 0.00025 0.18000 0.16800 63 0.01600 0.01128 0.00046 0.0025 0.14000 0.10500 64 0.01626 0.01174 0.00048 0.00025 0.15000 0.10500 65 0.01653 0.01219 0.00050 0.00025 0.23100 0.22100 66 0.01786 0.01335 0.00051 0.00025 0.18000 0.13700 68 0.01878 0.01393 0.00051 0.00025 0.15000	57	0.00939	0.00730	0.00034	0.00019	0.11200	0.11700		
58 0.01334 0.00383 0.00037 0.00021 0.11200 0.11700 59 0.01462 0.00980 0.00039 0.00022 0.21000 0.28600 60 0.01590 0.00992 0.00041 0.00023 0.08800 0.07800 61 0.01602 0.01037 0.00043 0.00023 0.08800 0.08400 62 0.01613 0.01083 0.00045 0.00025 0.18000 0.16800 63 0.01600 0.01128 0.00046 0.0025 0.14000 0.10500 64 0.01626 0.01174 0.00048 0.0025 0.15000 0.10500 65 0.01653 0.01219 0.00050 0.0025 0.23100 0.22100 66 0.01866 0.01277 0.00051 0.00025 0.18000 0.15800 67 0.01786 0.01335 0.00051 0.00025 0.15000 0.13700 68 0.01878 0.01393 0.00051 0.00025 0.15000	58	0.01033	0.00729	0.00030	0.00020	0.11200	0.11700		
59 0.01402 0.00360 0.00039 0.00022 0.21000 0.28000 60 0.01590 0.00992 0.00041 0.00023 0.08800 0.07800 61 0.01602 0.01037 0.00043 0.00023 0.08800 0.08400 62 0.01613 0.01083 0.00045 0.00025 0.18000 0.16800 63 0.01600 0.01128 0.00046 0.00025 0.14000 0.10500 64 0.01626 0.01174 0.00048 0.00025 0.15000 0.10500 65 0.01653 0.01219 0.00050 0.00025 0.23100 0.22100 66 0.01866 0.01277 0.00051 0.00025 0.18000 0.15800 67 0.01786 0.01335 0.00051 0.00025 0.15000 0.13700 68 0.01878 0.01393 0.00051 0.00025 0.15000 0.11600 69 0.01686 0.01393 0.00051 0.00025 0.15000	50	0.01354	0.00885	0.00037	0.00021	0.11200	0.11700		
60 0.01350 0.00322 0.00041 0.00023 0.08800 0.01800 61 0.01602 0.01037 0.00043 0.00023 0.08800 0.08400 62 0.01613 0.01083 0.00045 0.00025 0.18000 0.16800 63 0.01600 0.01128 0.00046 0.00025 0.14000 0.10500 64 0.01626 0.01174 0.00048 0.00025 0.15000 0.10500 65 0.01653 0.01219 0.00050 0.00025 0.23100 0.22100 66 0.01866 0.01277 0.00051 0.00025 0.18000 0.15800 67 0.01786 0.01335 0.00051 0.00025 0.15000 0.13700 68 0.01878 0.01393 0.00051 0.00025 0.15000 0.11600 69 0.01686 0.01393 0.00051 0.00025 0.15000 0.11600	60	0.01402	0.00980	0.00039	0.00022	0.21000	0.28000		
61 0.01002 0.01057 0.00045 0.00025 0.08800 0.08400 62 0.01613 0.01083 0.00045 0.00025 0.18000 0.16800 63 0.01600 0.01128 0.00046 0.00025 0.14000 0.10500 64 0.01626 0.01174 0.00048 0.00025 0.15000 0.10500 65 0.01653 0.01219 0.00050 0.00025 0.23100 0.22100 66 0.01866 0.01277 0.00051 0.00025 0.18000 0.15800 67 0.01786 0.01335 0.00051 0.00025 0.15000 0.13700 68 0.01878 0.01393 0.00051 0.00025 0.15000 0.11600 69 0.01686 0.01451 0.00052 0.15000 0.11600	61	0.01590	0.00992	0.00041	0.00023	0.08800	0.07800		
62 0.01015 0.01035 0.00045 0.00025 0.10000 0.10800 63 0.01600 0.01128 0.00046 0.00025 0.14000 0.10500 64 0.01626 0.01174 0.00048 0.00025 0.15000 0.10500 65 0.01653 0.01219 0.00050 0.00025 0.23100 0.22100 66 0.01686 0.01277 0.00051 0.00025 0.18000 0.15800 67 0.01786 0.01335 0.00051 0.00025 0.15000 0.13700 68 0.01878 0.01393 0.00051 0.00025 0.15000 0.11600 69 0.01686 0.01451 0.00052 0.15000 0.11600	62	0.01602	0.01037	0.00045	0.00025	0.08800	0.08400		
65 0.01626 0.01126 0.00040 0.00025 0.14000 0.10300 64 0.01626 0.01174 0.00048 0.00025 0.15000 0.10500 65 0.01653 0.01219 0.00050 0.00025 0.23100 0.22100 66 0.01686 0.01277 0.00051 0.00025 0.18000 0.15800 67 0.01786 0.01335 0.00051 0.00025 0.15000 0.13700 68 0.01878 0.01393 0.00051 0.00025 0.15000 0.11600 69 0.01686 0.01451 0.00052 0.00025 0.15000 0.11600	63	0.01600	0.01085	0.00045	0.00025	0.13000	0.10500		
64 0.0120 0.01174 0.00040 0.00025 0.15000 0.10500 65 0.01653 0.01219 0.00050 0.00025 0.23100 0.22100 66 0.01686 0.01277 0.00051 0.00025 0.18000 0.15800 67 0.01786 0.01335 0.00051 0.00025 0.15000 0.13700 68 0.01878 0.01393 0.00051 0.00025 0.15000 0.11600 69 0.01688 0.01451 0.00052 0.00025 0.15000 0.11600	64	0.01606	0.01120	0.00040	0.00025	0.15000	0.10500		
65 0.01055 0.01217 0.00050 0.00025 0.2100 0.2100 66 0.01686 0.01277 0.00051 0.00025 0.18000 0.15800 67 0.01786 0.01335 0.00051 0.00025 0.15000 0.13700 68 0.01878 0.01393 0.00051 0.00025 0.15000 0.11600 69 0.0168 0.01451 0.00052 0.00025 0.15000 0.11600	65	0.01020	0.01174	0.00048	0.00025	0.13000	0.10500		
60 0.01260 0.01277 0.00051 0.00025 0.10000 0.13800 67 0.01786 0.01335 0.00051 0.00025 0.15000 0.13700 68 0.01878 0.01393 0.00051 0.00025 0.15000 0.11600 69 0.0168 0.01451 0.00052 0.00025 0.15000 0.11600	66	0.01035	0.01219	0.00050	0.00025	0.23100	0.22100		
67 0.01780 0.01333 0.00031 0.00023 0.13000 0.13700 68 0.01878 0.01393 0.00051 0.00025 0.15000 0.11600 69 0.0168 0.01451 0.00052 0.00025 0.15000 0.11600	67	0.01080	0.01277	0.00051	0.00025	0.15000	0.13700		
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	69	0.01780	0.01333	0.00051	0.00025	0.15000	0.13700		
	60	0.01070	0.01393	0.00051	0.00025	0.15000	0.11600		
	70	0.00000	0.00000	0.000002	0.00023	1 00000	1 00000		



ACTIVE SERVICE AND RETIREMENT TABLE (CONTINUED)

	State and Local Employees Rates of: Prosecutors Part Service Retirement with Service					
	Less than 20 Years				More than 24 Years	
				21 to 24		2110
AGE	State	Local	20 Vears	Vears	State	Local
ROL	State	Local	20 10015	Itals	State	Local
20	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
21	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
22	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
23	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
24	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
25	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
26	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
27	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
28	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
29	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
30	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
31	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
32	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
33	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
34	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
35	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
36	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
30	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
38	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
30	0.00000	0.00000	0.00000	0.00000	0.23100	0.15400
40	0.00000	0.00000	0.02500	0.00000	0.23100	0.15400
40	0.00000	0.00000	0.02500	0.00000	0.23100	0.15400
41	0.00000	0.00000	0.02500	0.00000	0.23100	0.15400
42	0.00000	0.00000	0.02500	0.00000	0.23100	0.15400
43	0.00000	0.00000	0.02500	0.00000	0.23100	0.15400
44	0.00000	0.00000	0.02500	0.00000	0.23100	0.15400
45	0.00000	0.00000	0.02500	0.00000	0.23100	0.15400
40	0.00000	0.00000	0.02500	0.00000	0.23100	0.15400
47	0.00000	0.00000	0.02500	0.00000	0.23100	0.15400
40	0.00000	0.00000	0.03750	0.00000	0.23100	0.15400
49 50	0.00000	0.00000	0.03750	0.00000	0.23100	0.15400
51	0.00000	0.00000	0.03750	0.00000	0.23100	0.15400
52	0.00000	0.00000	0.03750	0.00000	0.23100	0.15400
52	0.00000	0.00000	0.03730	0.00000	0.25100	0.13400
55	0.00000	0.00000	0.05000	0.00000	0.20220	0.17400
55	0.00000	0.00000	0.05000	0.00000	0.20220	0.17400
55	0.02585	0.03000	0.05000	0.00000	0.20220	0.17400
57	0.02383	0.03000	0.05000	0.00000	0.20220	0.17400
59	0.02383	0.03000	0.05000	0.00000	0.20220	0.17400
50	0.02030	0.03000	0.05000	0.00000	0.20220	0.17460
59	0.02030	0.03000	0.05000	0.00000	0.34170	0.22780
61	0.02030	0.03000	0.03000	0.00000	0.34170	0.22780
62	0.02030	0.03000	0.03000	0.00000	0.34170	0.22780
62	0.02030	0.03000	0.15000	0.00000	0.34170	0.22780
64	0.02030	0.03000	0.13000	0.00000	0.54170	0.22/80
04 65	0.02030	0.03000	0.37500	0.00000	0.30700	0.37800
03 66	0.02030	0.03060	0.37500	0.00000	1.00000	1.00000
00	0.02030	0.03060	0.37500	0.00000	1.00000	1.00000
6/	0.02630	0.03060	0.3/500	0.00000	1.00000	1.00000
68	0.02630	0.03060	0.37500	0.00000	1.00000	1.00000
69	0.02630	0.03060	0.3/500	0.00000	1.00000	1.00000
70	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000



	Increase		Increase
Age	Rate	Age	Rate
20	0.0665	45	0.0540
21	0.0660	46	0.0535
22	0.0655	47	0.0530
23	0.0650	48	0.0525
24	0.0645	49	0.0520
25	0.0640	50	0.0515
26	0.0635	51	0.0510
27	0.0630	52	0.0505
28	0.0625	53	0.0500
29	0.0620	54	0.0495
30	0.0615	55	0.0490
31	0.0610	56	0.0485
32	0.0605	57	0.0480
33	0.0600	58	0.0475
34	0.0595	59	0.0470
35	0.0590	60	0.0465
36	0.0585	61	0.0455
37	0.0580	62	0.0445
38	0.0575	63	0.0435
39	0.0570	64	0.0425
40	0.0565	65	0.0415
41	0.0560	66	0.0415
42	0.0555	67	0.0415
43	0.0550	68	0.0415
44	0.0545	69	0.0415

ACTIVE SALARY INCREASE TABLE



	RATES OF MORTALITY			RATES OF MORTALITY	
AGE	MEN	WOMEN	AGE	MEN	WOMEN
20	0.00034	0.00019	63	0.01001	0.00666
21	0.00036	0.00019	64	0.01128	0.00765
22	0.00037	0.00019	65	0.01274	0.00862
23	0.00037	0.00019	66	0.01441	0.00971
24	0.00038	0.00020	67	0.01608	0.01095
25	0.00038	0.00020	68	0.01787	0.01216
26	0.00038	0.00021	69	0.01980	0.01345
27	0.00038	0.00021	70	0.02221	0.01486
28	0.00039	0.00022	71	0.02457	0.01674
29	0.00041	0.00024	72	0.02728	0.01858
30	0.00044	0.00025	73	0.03039	0.02066
31	0.00050	0.00026	74	0.03390	0.02297
32	0.00056	0.00031	75	0.03783	0.02546
33	0.00063	0.00035	76	0.04217	0.02811
34	0.00070	0.00039	77	0.04691	0.03097
35	0.00077	0.00043	78	0.05212	0.03411
36	0.00084	0.00047	79	0.05793	0.03759
37	0.00090	0.00051	80	0.06437	0.04151
38	0.00096	0.00055	81	0.07204	0.04588
39	0.00102	0.00060	82	0.08049	0.05078
40	0.00108	0.00065	83	0.08972	0.05629
41	0.00114	0.00071	84	0.09978	0.06251
42	0.00121	0.00077	85	0.11076	0.06952
43	0.00130	0.00085	80	0.12280	0.07745
44	0.00140	0.00094	87	0.13004	0.08638
43	0.00151	0.00103	00	0.15059	0.09034
40	0.00102	0.00112	89 00	0.10042	0.10750
47	0.00175	0.00122	90	0.10077	0.11915
48	0.00180	0.00133	91	0.19977	0.13108
50	0.00200	0.00145	03	0.23366	0.14400
51	0.00214	0.00155	94	0.25060	0.13702
52	0.00243	0.00100	95	0.25009	0.17045
53	0.00292	0.00103	96	0.28391	0.19451
54	0.00222	0.00202	97	0.29985	0.20538
55	0.00362	0.00242	98	0.31530	0.21524
56	0.00420	0.00272	99	0.33021	0.22395
57	0.00469	0.00309	100	0.34456	0.23139
58	0.00527	0.00348	101	0.35863	0.23747
59	0.00595	0.00392	102	0.37169	0.24483
60	0.00675	0.00444	103	0.38304	0.25450
61	0.00768	0.00506	104	0.39200	0.26604
62	0.00876	0.00581	105	0.39789	0.27905

MORTALITY TABLES FOR SERVICE RETIREMENTS AND BENEFICIARIES OF DECEASED MEMBERS



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TABLE 3

	RATES OF MORTALITY			RATES OF MORTALITY	
AGE	MEN	WOMEN	AGE	MEN	WOMEN
20	0.00000	0.00000	63	0.04204	0.02408
21	0.00000	0.00000	64	0.04347	0.02529
22	0.00000	0.00745	65	0.04498	0.02660
23	0.00000	0.00745	66	0.04658	0.02803
24	0.02257	0.00745	67	0.04831	0.02959
25	0.02257	0.00745	68	0.05017	0.03132
26	0.02257	0.00745	69	0.05221	0.03323
27	0.02257	0.00745	70	0.05445	0.03534
28	0.02257	0.00745	71	0.05691	0.03763
29	0.02257	0.00745	72	0.05961	0.04014
30	0.02257	0.00745	73	0.06258	0.04285
31	0.02257	0.00745	74	0.06584	0.04577
32	0.02257	0.00745	75	0.06941	0.04890
33	0.02257	0.00745	76	0.07329	0.05223
34	0.02257	0.00745	77	0.07751	0.05578
35	0.02257	0.00745	78	0.08207	0.05954
36	0.02257	0.00745	79	0.08695	0.06354
37	0.02257	0.00745	80	0.09215	0.06779
38	0.02257	0.00745	81	0.09764	0.07231
39	0.02257	0.00745	82	0.10339	0.07713
40	0.02257	0.00745	83	0.10937	0.08230
41	0.02257	0.00745	84	0.11554	0.08784
42	0.02257	0.00745	85	0.12188	0.09379
43	0.02257	0.00745	86	0.12834	0.10020
44	0.02257	0.00745	87	0.13492	0.10/10
45	0.02257	0.00745	88	0.14160	0.11451
40	0.02257	0.00745	89	0.14837	0.12240
47	0.02257	0.00818	90	0.15525	0.13097
48	0.02237	0.00896	91	0.16219	0.14003
49 50	0.02585	0.00977	92	0.10923	0.14970
51	0.02512	0.01003	93	0.10077	0.13992
52	0.02040	0.01133	94 05	0.19977	0.17043
52	0.02709	0.01246	95	0.23366	0.10200
54	0.02098	0.01340	90 97	0.25069	0.19431
55	0.03027	0.01550	98	0.25009	0.20530
56	0.03786	0.01550	99	0.28391	0 22395
57	0.03415	0.01760	100	0.29985	0 23139
58	0.03544	0.01865	101	0.31530	0.23747
59	0.03673	0.01971	102	0.33021	0.24483
60	0.03803	0.02077	103	0.34456	0.25450
61	0.03933	0.02184	104	0.35863	0.26604
62	0.04067	0.02294	105	0.37169	0.27905
	0.01007	0.022/1		0.07107	0.27700

MORTALITY TABLES FOR DISABILITY RETIREMENTS



ADOPTION AND CERTIFICATION OF TABLES AND PROCEDURES PRESENTED

The foregoing tables and procedures, recommended by the actuary for adoption by the Board of Trustees, were considered by the Board at its regular meeting on ______, 2009 and officially approved in accordance with the resolutions passed.

Secretary, Board of Trustees

_____,2009

