

Public Employees' Retirement System of New Jersey

Report on an Investigation of Experience
Prepared as of June 30, 2014



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September 22, 2015

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

Members of the Board:

This year an actuarial investigation of the mortality and service 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, which examined the experience of the System from July 1, 2011 to June 30, 2014 are described in the attached report.

Buck performed the experience review based on data supplied by the State of New Jersey Division of Pensions and Benefits. Buck Consultants did not audit the data, although it was reviewed for reasonableness and consistency with prior data. The results of this review are dependent on the accuracy of the data.

The assumptions recommended in this report are proposed for use in valuing the pension benefits for members in the Public Employees' Retirement System. Use of these assumptions for any other purpose may not be appropriate. No one may make any representations or guarantees based on any statements or conclusions contained in this report without the written consent of Buck Consultants.

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

This report was prepared under my supervision. I am a Fellow of the Society of Actuaries and a Member of the American Academy of Actuaries. I meet the Academy's qualification Standards to issue this Statement of Actuarial Opinion. This report has been prepared in accordance with all applicable Actuarial Standards of Practice and I am available to answer questions about it.

Respectfully submitted,

Aaron Shapiro, FSA, EA, MAAA
Principal, Consulting Actuary

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Section 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 was prepared in accordance with applicable Actuarial Standards of Practice (ASOP). The Standards of Practice provide guidance to actuaries in selecting various actuarial assumptions for measuring obligations under defined benefit plans.

This report summarizes the Retirement System experience for the period from July 1, 2011 through June 30, 2014. Experience for State employees and for employees of the various Municipalities & Local Groups participating in the System were examined separately, while Retirees and Beneficiaries were examined in total. Please note that, in instances where the data being examined appeared inconsistent with prior results or incomplete, we made no current recommendation. These items will be reviewed closely when the next scheduled experience study is prepared as of June 30, 2017 and proposed changes, if warranted, will be recommended at that time. Also, this study examined the effect of the following legislation:

- 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 1, P.L. 2010 closed the Prosecutors Part of the System to new members enrolled on or after May 22, 2010.
- 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.

Section 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, 2011. 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, 2011.

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. 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.

Section III.A.I. examines experience for State employees, while Section III.A.II. considers experience for employees of local employers.

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 Section III.A.I.e. for State employees and Section III.A.II.e. 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 slower than anticipated.

Section III.B. gives 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.

Section III—Comments and General Recommendation of the Actuary

The following presents the tabular results of the experience data studied, a discussion of the results and our recommendation.

The tables present a summary of the number of exposures, actual and expected experience and the ratios of actual to expected experience. In addition, we have prepared graphs that illustrate the actual current and proposed (if applicable) rates for each assumption. Please note that the experience for certain assumptions, such as accidental death that has a large exposed population and a rather small incidence, does not graph well because of the relative number of members.

A. Active Plan Experience

The first portion of this section contains a summary of active plan experience, which examines the following rates:

I. State

- a. Withdrawal Rates
- b. Ordinary and Accidental Disability Rates
- c. Deferred Vested, Early, and Service Retirement Rates
- d. Chapter 366, P.L. 2001 – Prosecutors Service Retirement Rates
- e. Salary Increase Rates

II. Local Employers

- a. Withdrawal Rates
- b. Ordinary and Accidental Disability Rates
- c. Deferred Vested, Early, and Service Retirement Rates
- d. Chapter 366, P.L. 2001 – Prosecutors Service Retirement Rates
- e. Salary Increase Rates

I. State

a. Withdrawal Rates

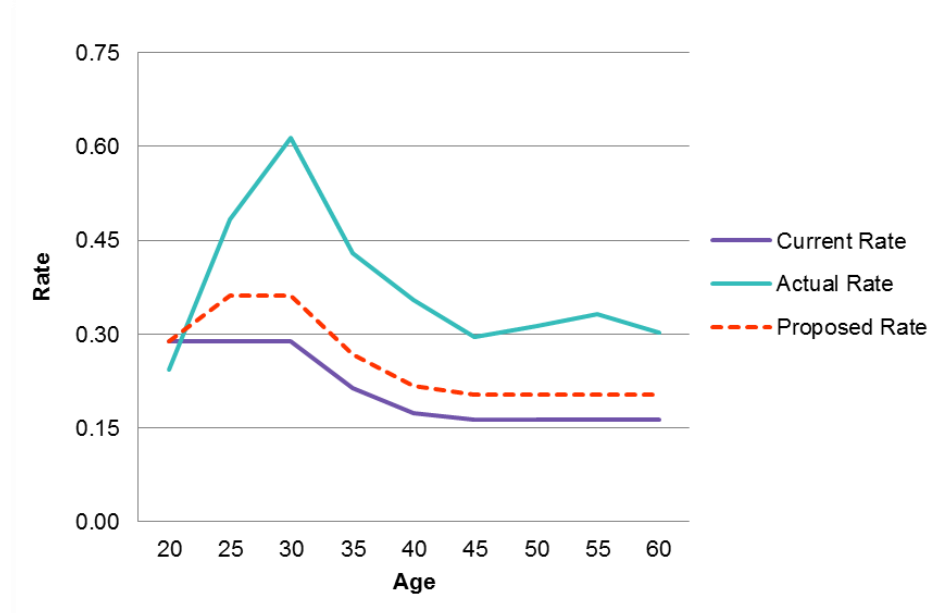
The following table presents a summary of the number of exposures, actual and expected terminations and the ratios of actual to expected terminations of non-vested withdrawals.

Years of Service	Central Age of Group	Number of Separations					
		Exposures	Actual	Expected		Ratio of Actual to Expected	
				Current	Proposed	Current	Proposed
0	All	6,042	2,698	1,420.24	1,766.12	1.900	1.528
1	All	12,021	811	1,333.26	1,333.26	0.608	0.608
2	All	8,480	714	640.93	640.93	1.114	1.114
Ultimate	20	70	1	3.13	3.13	0.319	0.319
	25	3,672	149	157.59	157.59	0.945	0.945
	30	16,205	583	623.60	623.60	0.935	0.935
	35	21,123	592	634.54	634.54	0.933	0.933
	40	23,000	433	395.14	395.14	1.096	1.096
	45	30,627	440	395.09	395.09	1.114	1.114
	50	38,361	364	343.73	343.73	1.059	1.059
	55	31,862	353	281.03	281.03	1.256	1.256
	60	9,313	99	82.12	82.12	1.206	1.206
		Subtotal Ultimate	174,233	3,014	2,915.97	2,915.97	1.034
	Total Withdrawals		7,237	6,310	6,656	1.147	1.087

Recommendation: Increase the withdrawal rates for participants with less than 1 year of service for ages 25 through 60.

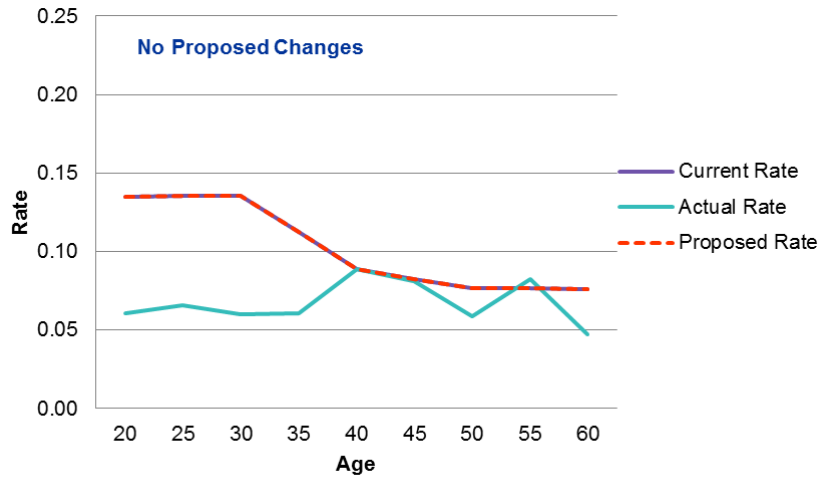
Actual withdrawals were about 15% higher than those expected. The data indicates that participants with less than 1 year of service are withdrawing at a rate higher than expected. Therefore, we recommend increasing the rates at the ages at which this actual incidence has been much greater than expected.

Withdrawals during first year of employment

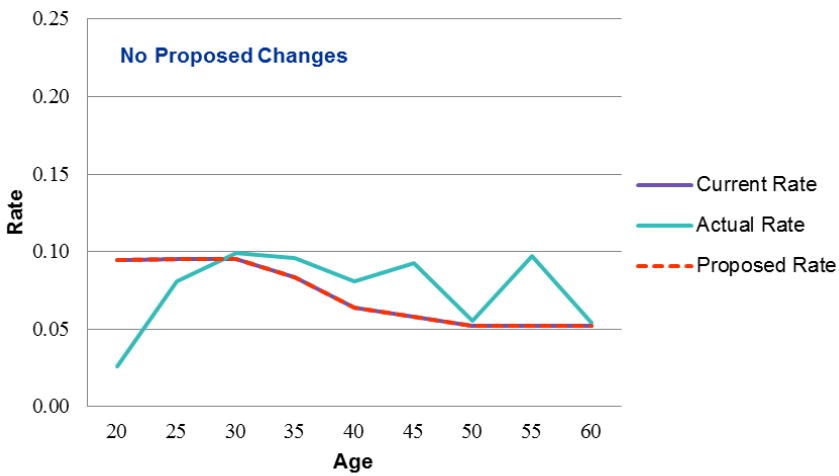


I. State (continued)

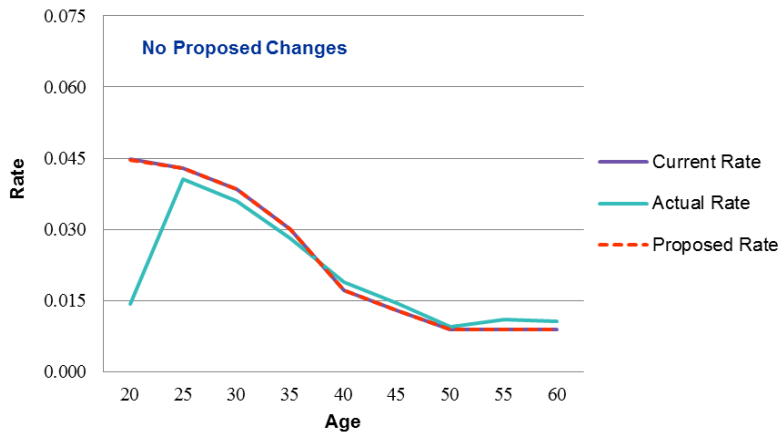
Withdrawals during second year of employment



Withdrawals during third year of employment



Ultimate Rates of Withdrawal



I. State (continued)

b. Ordinary and Accidental Disability Rates

The following table presents a summary of the number of exposures, actual and expected terminations and the ratios of actual to expected terminations due to ordinary and accidental disability.

Type	Central Age of Group	Number of Separations					
		Exposures	Actual	Expected		Ratio of Actual to Expected	
				Current	Proposed	Current	Proposed
Due to Ordinary Causes	20	0	0	0.00	0	0.000	0.000
	25	5	0	0.00	0.00	0.000	0.000
	30	1,632	4	1.65	1.65	2.424	2.424
	35	8,076	14	19.32	17.39	0.725	0.805
	40	12,923	42	45.77	41.19	0.918	1.020
	45	21,147	74	106.48	85.18	0.695	0.869
	50	28,941	136	173.71	138.97	0.783	0.979
	55	31,013	138	216.73	173.38	0.637	0.796
	60	23,723	168	277.64	222.11	0.605	0.756
	65	11,857	100	176.32	141.06	0.567	0.709
	69	1,984	13	34.28	27.42	0.379	0.474
	Total	141,301	689	1,051.90	848.35	0.655	0.812
Due to Accidental Causes	20	235	0	0.00	0.00	0.000	0.000
	25	5,270	1	0.07	0.08	14.286	12.500
	30	18,165	0	0.65	0.78	0.000	0.000
	35	22,301	2	1.99	2.39	1.005	0.837
	40	24,093	12	4.07	4.88	2.948	2.459
	45	31,677	14	6.11	7.33	2.291	1.910
	50	39,497	23	11.73	14.08	1.961	1.634
	55	40,425	20	15.71	18.85	1.273	1.061
	60	30,719	12	12.48	12.48	0.962	0.962
	65	16,224	7	9.65	9.65	0.725	0.725
69	2,881	1	1.79	1.79	0.559	0.559	
	Total	231,487	92	64.25	72.31	1.432	1.272
Due to All Causes	Grand Total		781	1,116.15	920.66	0.700	0.848

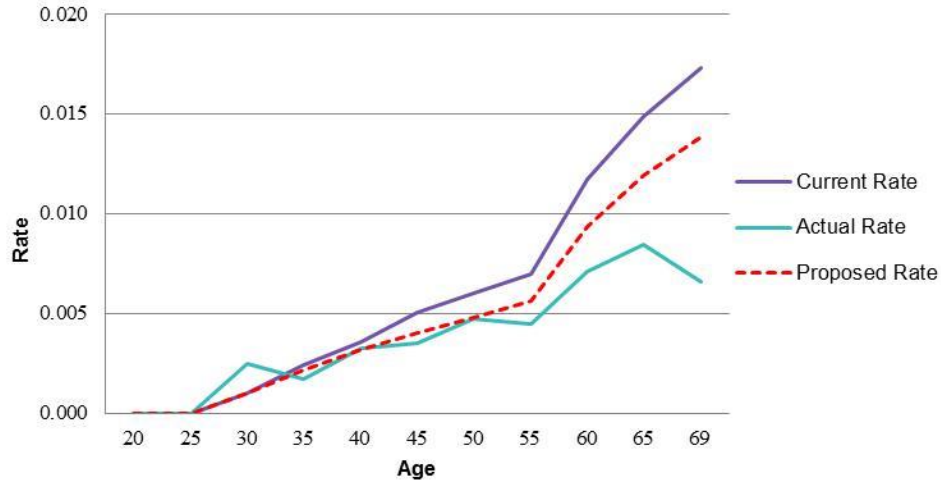
Recommendation: Decrease rates at for Ordinary Disability for ages 35 to 69. Increase rates for Accidental Disability for ages 25 to 55.

The data for termination due to ordinary disability indicates that the number of actual disabilities was about 35% lower than that expected during the measurement period. This result is consistent with the results of the prior study, in which a significant reversal of the trend for disability retirements was first recognized. As in the prior study, we note that this continued decrease in ordinary disability retirements may be caused by the liberalization of the conditions for receiving an accidental disability pension due to the New Jersey Supreme Court ruling in the *Richardson v. Board of Trustees*. Therefore, except for ages 20 to 30, we are recommending a further decrease in the assumed rates of ordinary disability.

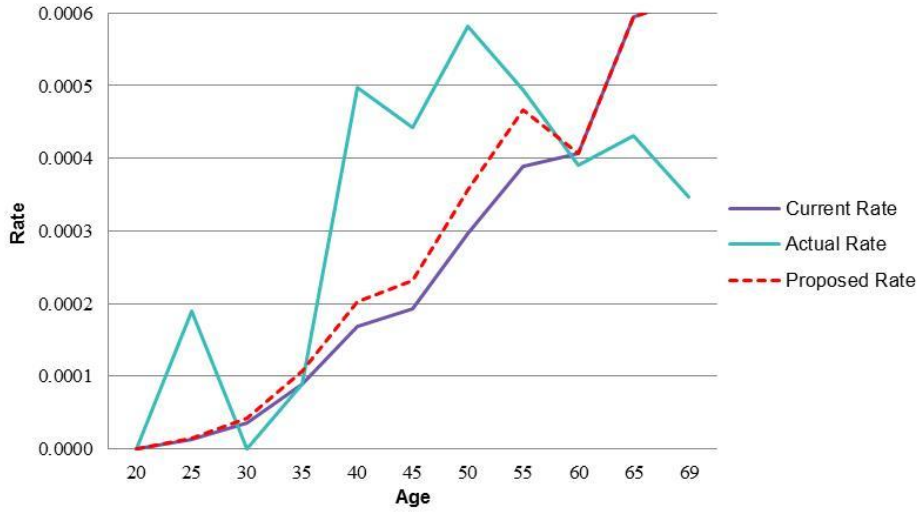
For the same reason, the data shows an increase in the actual rate of accidental disability. Therefore, we are recommending an increase in Accidental Disability rates for ages 25 to 55.

I. State (continued)

Ordinary Disability Rates



Accidental Disability Rates



I. State (continued)

c. Deferred Vested, Early, and Service Retirements

The following table presents a summary of the number of exposures, actual and expected terminations and the ratios of actual to expected terminations due to deferred vested, early, and service retirements.

Type	Central Age of Group	Number of Separations					
		Exposures	Actual	Expected		Ratio of Actual to Expected	
				Current	Proposed	Current	Proposed
Deferred Vested and Reduced Early Retirement	20	0	0	0.00	0.00	0.000	0.000
	25	5	0	0.00	0.00	0.000	0.000
	30	1,632	0	0.00	0.00	0.000	0.000
	35	8,078	0	3.72	3.72	0.000	0.000
	40	12,926	2	7.19	7.19	0.278	0.278
	45	21,158	67	69.57	69.57	0.963	0.963
	50	28,949	347	318.43	318.43	1.090	1.090
	55	23,280	317	349.21	331.75	0.908	0.956
	60	6,360	18	95.42	57.25	0.189	0.314
	Total	102,388	751	843.54	787.91	0.890	0.953
Service Retirement and Unreduced Early Retirement	55	2,893	545	506.28	506.28	1.076	1.076
	56	2,583	309	348.88	348.88	0.886	0.886
	57	2,353	277	305.89	305.89	0.906	0.906
	58	2,204	276	286.52	286.52	0.963	0.963
	59	2,294	449	435.86	435.86	1.030	1.030
	60	6,141	648	552.69	552.69	1.172	1.172
	61	5,448	481	490.32	490.32	0.981	0.981
	62	5,006	632	810.97	729.87	0.779	0.866
	63	4,407	472	555.28	499.75	0.850	0.944
	64	3,977	437	536.89	483.20	0.814	0.904
65	3,416	528	614.88	553.39	0.859	0.954	
66	2,662	445	452.54	452.54	0.983	0.983	
67	1,945	272	291.75	291.75	0.932	0.932	
68	1,552	204	232.80	232.80	0.876	0.876	
69	1,369	175	205.35	205.35	0.852	0.852	
Total	48,250	6,150	6,626.90	6,375.09	0.928	0.965	
Due to All Causes	Grand Total		6,901	7,470.44	7,163.00	0.924	0.963

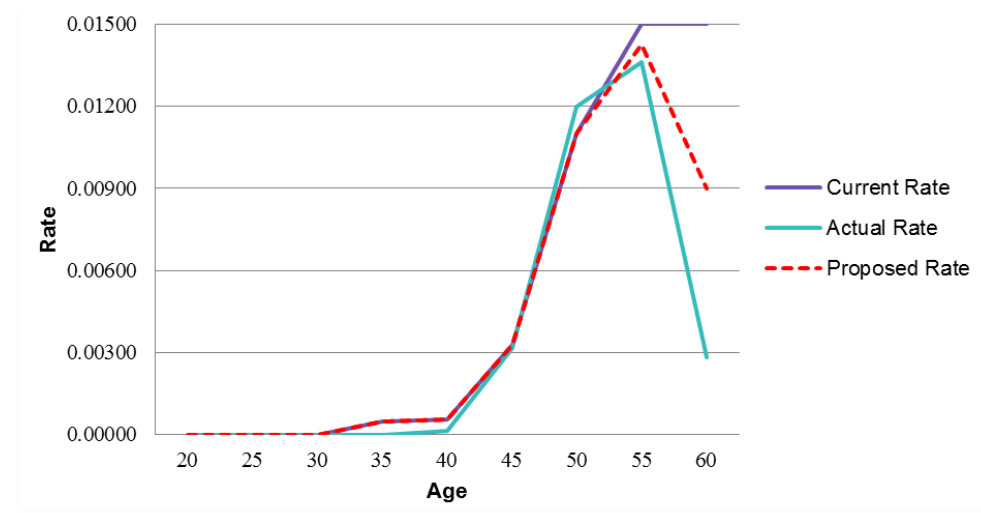
Recommendation: Decrease the deferred vested and early retirement rates for ages 55 and 60 to reflect experience. Decrease the service retirement rates from ages 62 to 65 to reflect experience.

The prior experience study observed a significant increase in the rate of Deferred Vested and Early Retirement rates. This study shows that there were 11% fewer retirements in this category than expected. We recommend decreasing rates at the later ages to more closely reflect the actual rates of Deferred Vested and Reduced Early retirement.

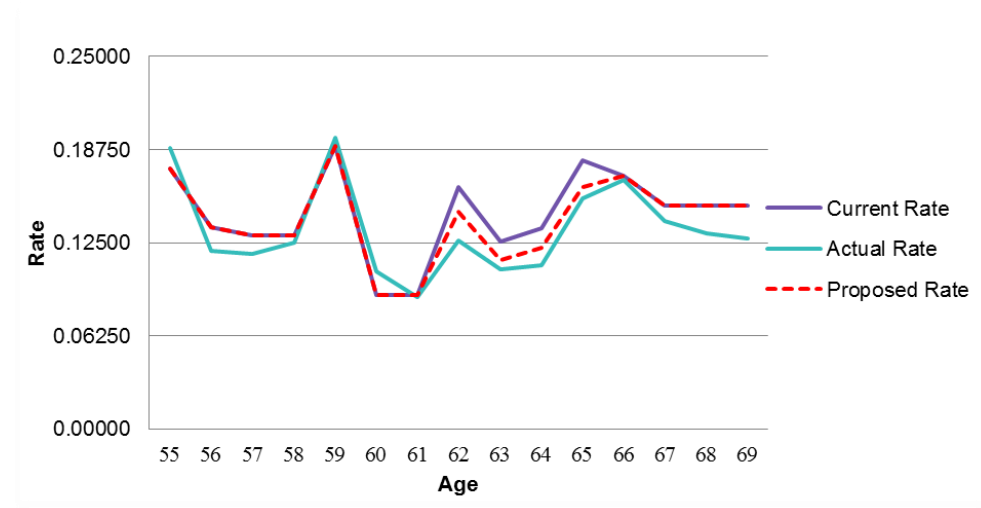
Service Retirements saw 7.2% fewer retirements than expected. Therefore we recommended decreasing the Service Retirement for ages 62 to 65.

I. State (continued)

Deferred Vested and Reduced Early Retirement



Service Retirements and Unreduced Early Retirement



I. State (continued)

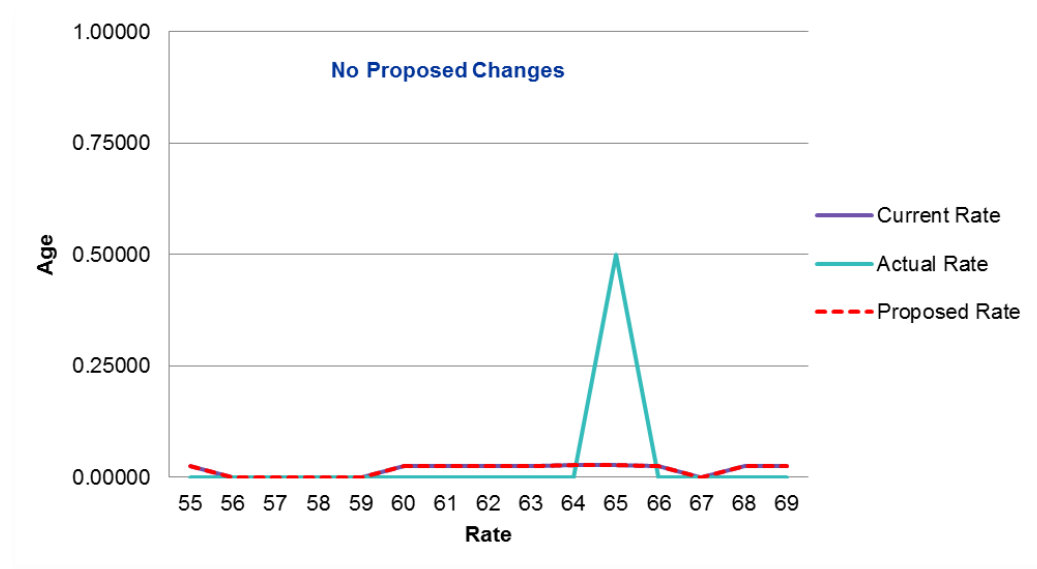
Chapter 366, P.L. 2001 provides benefits similar to those of the Police and Firemen's Retirement System (PFRS) to prosecutor members of the System who are not eligible for enrollment in PFRS. The original costs for Chapter 366 were based primarily on PERS assumptions determined in the June 30, 2002 experience 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.

d. Chapter 366, P.L. 2001 – Prosecutors Service Retirement Rates

Type	Central Age of Group	Number of Separations					
		Exposures	Actual	Expected		Ratio of Actual to Expected	
				Current	Proposed	Current	Proposed
Age 55 with Less than 20 Years of Service	55	7	0	0.18	0.18	0.000	0.000
	56	0	0	0.00	0.00	0.000	0.000
	57	0	0	0.00	0.00	0.000	0.000
	58	0	0	0.00	0.00	0.000	0.000
	59	0	0	0.00	0.00	0.000	0.000
	60	2	0	0.05	0.05	0.000	0.000
	61	2	0	0.05	0.05	0.000	0.000
	62	2	0	0.05	0.05	0.000	0.000
	63	2	0	0.05	0.05	0.000	0.000
	64	4	0	0.11	0.11	0.000	0.000
	65	4	2	0.11	0.11	18.182	18.182
	66	2	0	0.05	0.05	0.000	0.000
	67	0	0	0.00	0.00	0.000	0.000
	68	2	0	0.05	0.05	0.000	0.000
	69	2	0	0.05	0.05	0.000	0.000
Total		29	2	0.75	0.75	2.667	2.667

Recommendation: No proposed changes

While the rate of retirement for participants over the age of 55 with less than 20 years of service is greater than expected, the overall incidence is small and within an acceptable range. We recommend no changes to this rate.



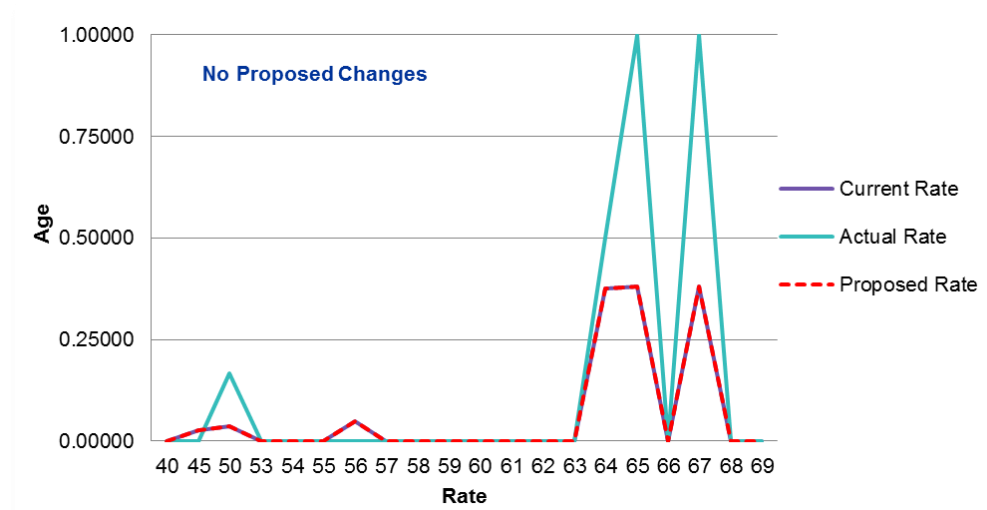
I. State (continued)

d. Chapter 366, P.L. 2001 – Prosecutors Service Retirement Rates (continued)

Type	Central Age of Group	Number of Separations					
		Exposures	Actual	Expected		Ratio of Actual to Expected	
				Current	Proposed	Current	Proposed
With 20 Years of Service	40	0	0	0.00	0.00	0.000	0.000
	45	3	0	0.08	0.08	0.000	0.000
	50	12	2	0.45	0.45	4.444	4.444
	53	0	0	0.00	0.00	0.000	0.000
	54	0	0	0.00	0.00	0.000	0.000
	55	0	0	0.00	0.00	0.000	0.000
	56	2	0	0.10	0.10	0.000	0.000
	57	0	0	0.00	0.00	0.000	0.000
	58	0	0	0.00	0.00	0.000	0.000
	59	0	0	0.00	0.00	0.000	0.000
	60	0	0	0.00	0.00	0.000	0.000
	61	0	0	0.00	0.00	0.000	0.000
	62	0	0	0.00	0.00	0.000	0.000
	63	0	0	0.00	0.00	0.000	0.000
	64	2	1	0.75	0.75	1.333	1.333
	65	1	1	0.38	0.38	2.632	2.632
	66	0	0	0.00	0.00	0.000	0.000
	67	1	1	0.38	0.38	2.632	2.632
	68	0	0	0.00	0.00	0.000	0.000
	69	0	0	0.00	0.00	0.000	0.000
	Total	21	5	2.14	2.14	2.336	2.336

Recommendation: No proposed changes

While the rate of retirement for participants with 20 years of service is greater than expected, the overall incidence is small and within an acceptable range. We recommend no changes to this rate.

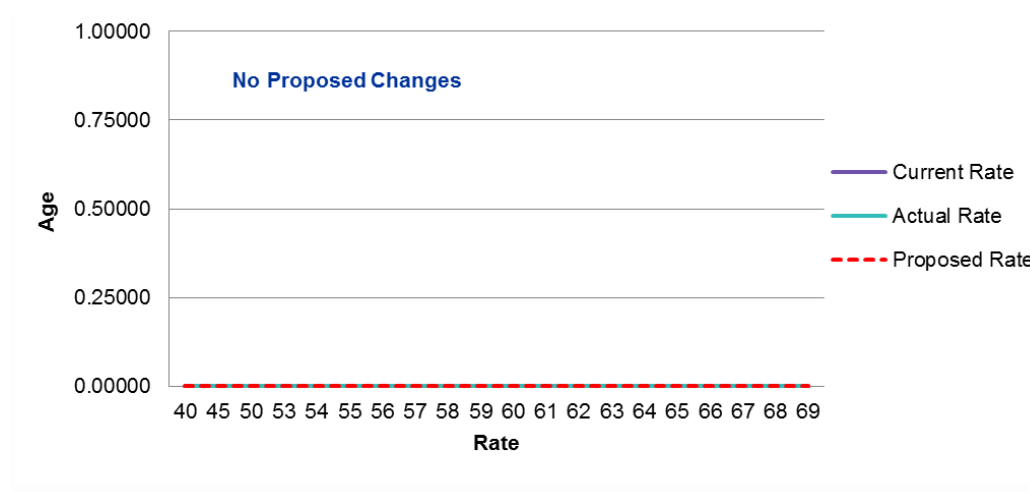


I. State (continued)

d. Chapter 366, P.L. 2001 – Prosecutors Service Retirement Rates (continued)

Type	Central Age of Group	Number of Separations					
		Exposures	Actual	Expected		Ratio of Actual to Expected	
				Current	Proposed	Current	Proposed
With 21 to 24 Years of Service	40	0	0	0.00	0.00	0.000	0.000
	45	2	0	0.00	0.00	0.000	0.000
	50	26	0	0.00	0.00	0.000	0.000
	53	5	0	0.00	0.00	0.000	0.000
	54	5	0	0.00	0.00	0.000	0.000
	55	4	0	0.00	0.00	0.000	0.000
	56	3	0	0.00	0.00	0.000	0.000
	57	4	0	0.00	0.00	0.000	0.000
	58	2	0	0.00	0.00	0.000	0.000
	59	1	0	0.00	0.00	0.000	0.000
	60	1	0	0.00	0.00	0.000	0.000
	61	0	0	0.00	0.00	0.000	0.000
	62	0	0	0.00	0.00	0.000	0.000
	63	0	0	0.00	0.00	0.000	0.000
	64	1	0	0.00	0.00	0.000	0.000
	65	0	0	0.00	0.00	0.000	0.000
	66	0	0	0.00	0.00	0.000	0.000
	67	0	0	0.00	0.00	0.000	0.000
	68	0	0	0.00	0.00	0.000	0.000
	69	0	0	0.00	0.00	0.000	0.000
	Total	54	0	0.00	0.00	0.000	0.000

Recommendation: No proposed changes



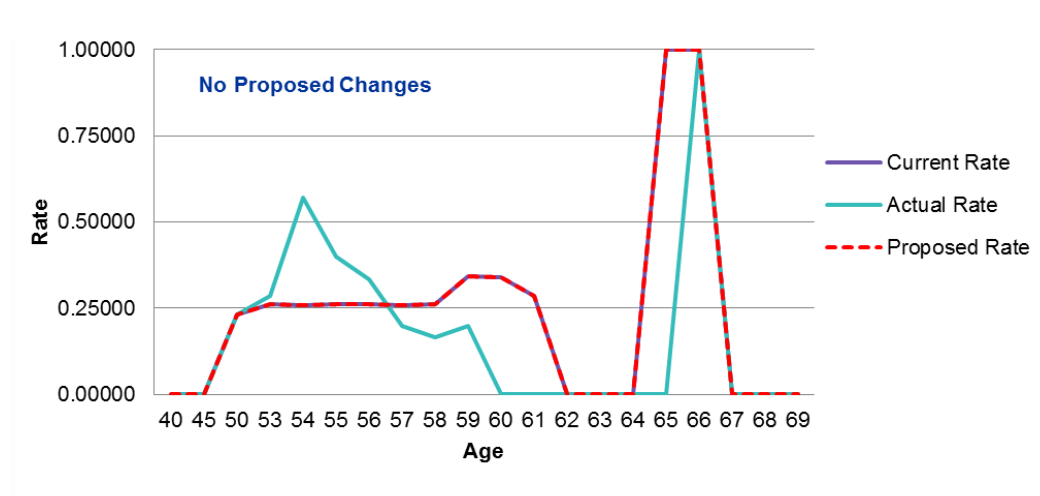
I. State (continued)

d. Chapter 366, P.L. 2001 – Prosecutors Service Retirement Rates (continued)

Type	Central Age of Group	Number of Separations					
		Exposures	Actual	Expected		Ratio of Actual to Expected	
				Current	Proposed	Current	Proposed
With More than 24 Years of Service	40	0	0	0.00	0.00	0.000	0.000
	45	0	0	0.00	0.00	0.000	0.000
	50	13	3	3.00	3.00	1.000	1.000
	53	7	2	1.84	1.84	1.087	1.087
	54	7	4	1.80	1.80	2.221	2.221
	55	5	2	1.31	1.31	1.527	1.527
	56	6	2	1.57	1.57	1.274	1.274
	57	10	2	2.59	2.59	0.772	0.772
	58	6	1	1.57	1.57	0.637	0.637
	59	5	1	1.71	1.71	0.585	0.585
	60	1	0	0.34	0.34	0.000	0.000
	61	2	0	0.57	0.57	0.000	0.000
	62	0	0	0.00	0.00	0.000	0.000
	63	0	0	0.00	0.00	0.000	0.000
	64	0	0	0.00	0.00	0.000	0.000
	65	1	0	1.00	1.00	0.000	0.000
	66	1	1	1.00	1.00	1.000	1.000
	67	0	0	0.00	0.00	0.000	0.000
	68	0	0	0.00	0.00	0.000	0.000
	69	0	0	0.00	0.00	0.000	0.000
	Total	64	18	18.30	18.30	0.983	0.983

Recommendation: No proposed changes

The rate of retirement for people with more than 24 years of service is 1.7% less than expected, which is well within the acceptable range. We recommend no changes to this rate.



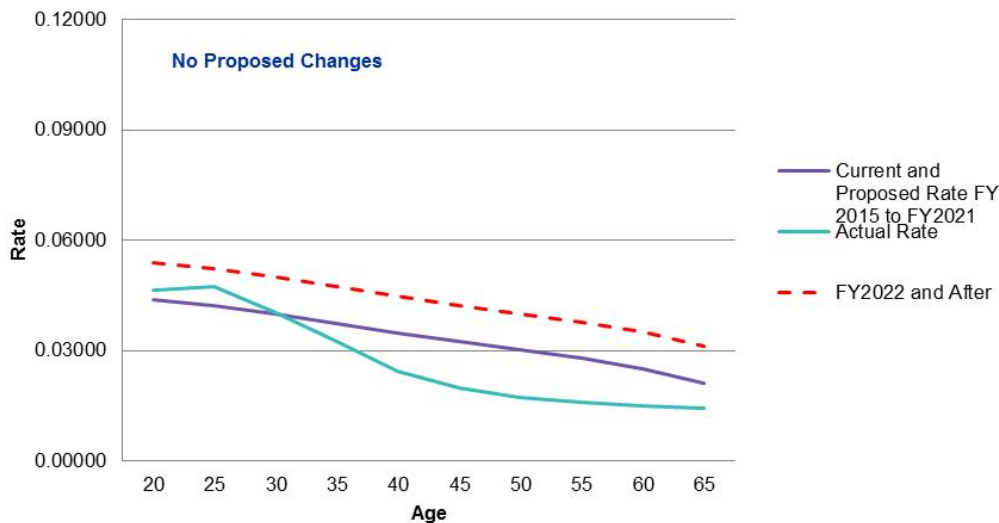
I. State (continued)

e. Salary Increase Rates

The following table presents a summary of the total salary from the prior year, actual and expected salary for the following year and the ratios of actual to expected salary among continuing actives. The table reflects the Salary experience during the period July 1, 2011 through June 30, 2014.

Central Age of Group	Salary Increase			
	Actual Salary from Previous Year	Actual	Expected	Ratio of Actual to Expected
20	80,717,496	84,467,114	84,256,238	1.003
25	748,799,936	784,246,693	780,315,416	1.005
30	1,223,540,656	1,272,839,397	1,272,423,678	1.000
35	1,347,610,372	1,391,479,162	1,398,021,115	0.995
40	1,719,500,788	1,761,623,369	1,779,306,381	0.990
45	2,208,315,623	2,251,919,086	2,279,726,193	0.988
50	2,423,564,616	2,465,327,973	2,496,448,444	0.988
55	2,056,759,029	2,089,813,696	2,113,918,694	0.989
60	1,246,627,859	1,265,448,323	1,277,740,792	0.990
65	562,440,232	570,497,157	574,317,379	0.993
Total	13,617,876,607	13,937,661,970	14,056,474,330	0.992

The above table shows that, in total, the annual salary increase assumption is within an acceptable range of actual experience. The current salary increase assumption reflects a 1.00% per annum increase in the salary scale for fiscal years ending 2022 and thereafter. We believe this is a reasonable assumption given the experience of the System and discussions with the Division of Pension and Benefits regarding anticipated salary growth. Therefore, we recommend no changes to the salary scale at this time. The average salary increase rate is about 3.50% until 2022. Beginning in 2022, the average salary increase rate will be about 4.50%.



II. Local Employers

a. Withdrawal Rates

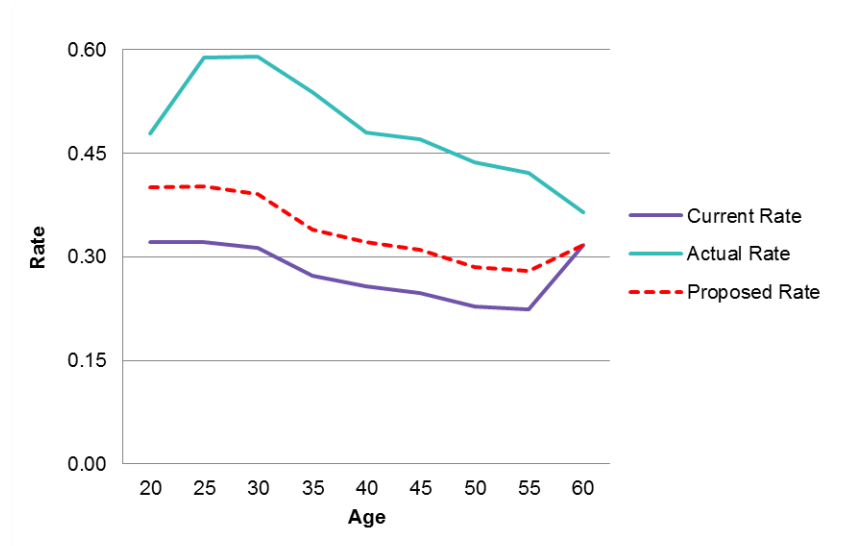
The following table presents a summary of the number of exposures, actual and expected terminations and the ratios of actual to expected terminations of non-vested withdrawals.

Years of Service	Central Age of Group	Number of Separations					
		Exposures	Actual	Expected		Ratio of Actual to Expected	
				Current	Proposed	Current	Proposed
0	All	12,139	6,265	3,374.07	4,190.47	1.857	1.495
1	All	28,109	3,853	3,429.10	3,429.10	1.124	1.124
2	All	23,649	3,034	2,076.59	2,575.19	1.461	1.178
Ultimate	20	719	27	45.07	45.07	0.599	0.599
	25	10,213	704	644.55	644.55	1.092	1.092
	30	23,421	1,458	1,411.16	1,411.16	1.033	1.033
	35	27,721	1,230	1,083.32	1,137.49	1.135	1.081
	40	39,554	1,260	1,089.14	1,143.60	1.157	1.102
	45	64,144	1,679	1,543.33	1,543.33	1.088	1.088
	50	90,600	1,928	1,713.28	1,798.94	1.125	1.072
	55	89,047	1,568	1,369.16	1,437.62	1.145	1.091
	60	29,869	420	455.19	455.19	0.923	0.923
		Subtotal Ultimate	375,288	10,274	9,354.20	9,616.95	1.098
	Total Withdrawals		23,426	18,234	19,812	1.285	1.182

Recommendation: Increase the withdrawal rates for participants with less than 1 year of service, participants with 2 years of service, and participants from ages 35-40 and 50-55 with 3 or more years of service.

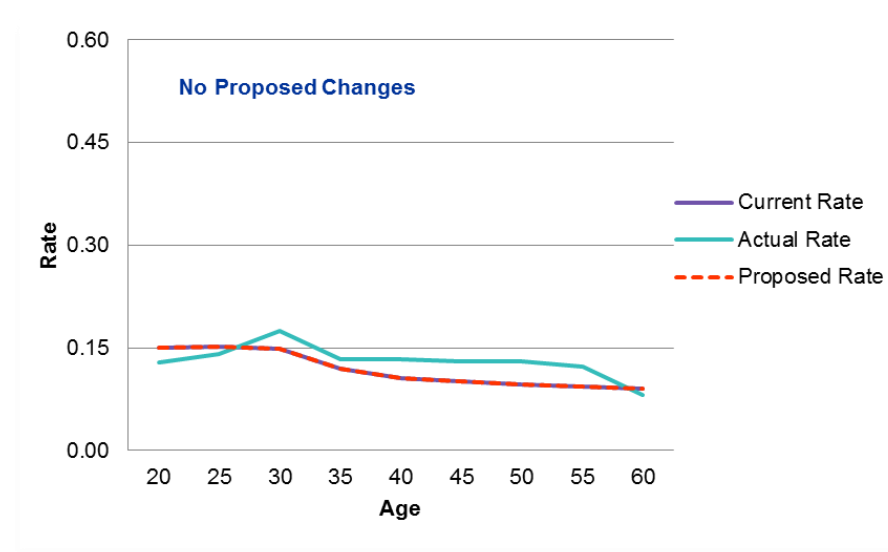
Actual withdrawals were about 28% higher than those expected. Therefore, we propose an increase in the assumed rates of withdrawal in these categories to more closely reflect the actual rates of withdrawal.

Withdrawals during first year of employment

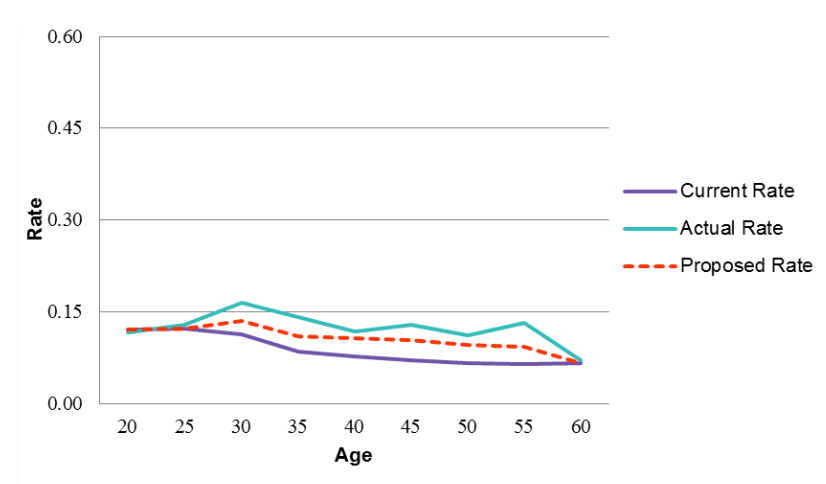


II. Local Employers (continued)

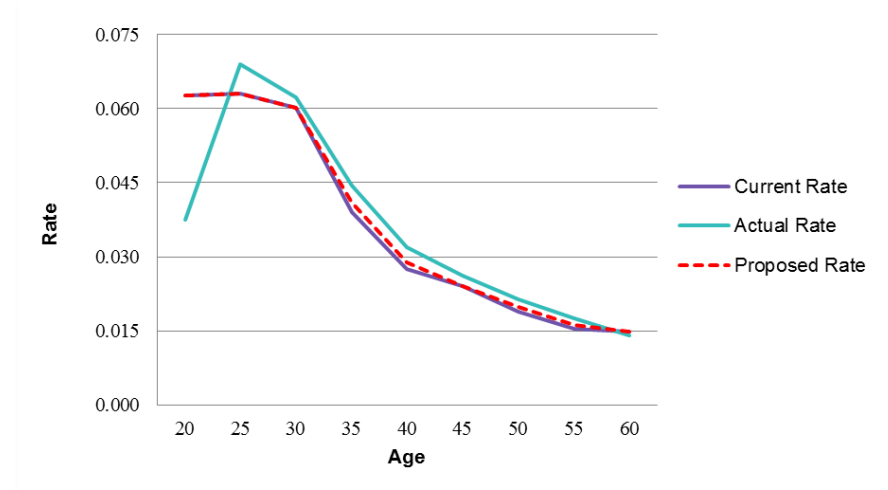
Withdrawals during second year of employment



Withdrawals during third year of employment



Ultimate Rates of Withdrawal



II. Local Employers (continued)

b. Ordinary and Accidental Disability Rates

The following table presents a summary of the number of exposures, actual and expected terminations and the ratios of actual to expected terminations due to ordinary and accidental disability.

Type	Central Age of Group	Number of Separations					
		Exposures	Actual	Expected		Ratio of Actual to Expected	
				Current	Proposed	Current	Proposed
Due to Ordinary Causes	20	0	0	0.00	0.00	0.000	0.000
	25	57	0	0.00	0.00	0.000	0.000
	30	3,033	2	3.07	2.61	0.651	0.766
	35	10,357	15	24.03	20.43	0.624	0.734
	40	19,729	38	60.10	51.09	0.632	0.744
	45	35,415	128	133.69	133.69	0.957	0.957
	50	56,301	246	296.47	252.00	0.830	0.976
	55	69,441	326	453.61	385.57	0.719	0.846
	60	59,162	364	526.39	447.43	0.692	0.814
	65	32,489	228	353.63	300.59	0.645	0.759
	69	6,474	60	82.79	70.37	0.725	0.853
	Total	292,458	1,407	1,933.78	1,663.78	0.728	0.846
Due to Accidental Causes	20	1,461	0	0.02	0.02	0.000	0.000
	25	15,469	0	0.44	0.44	0.000	0.000
	30	28,175	2	1.13	1.13	1.770	1.770
	35	30,513	7	1.35	1.76	5.185	3.977
	40	42,800	16	3.85	5.01	4.156	3.194
	45	68,347	22	9.12	11.86	2.412	1.855
	50	95,022	24	15.81	20.55	1.518	1.168
	55	101,458	35	21.87	26.24	1.600	1.334
	60	81,003	33	20.10	24.12	1.642	1.368
	65	47,393	13	12.79	12.79	1.016	1.016
	69	10,224	5	2.76	2.76	1.812	1.812
	Total	521,865	157	89.24	106.68	1.759	1.472
Due to All Causes	Grand Total		1,564	2,023.02	1,770.46	0.773	0.883

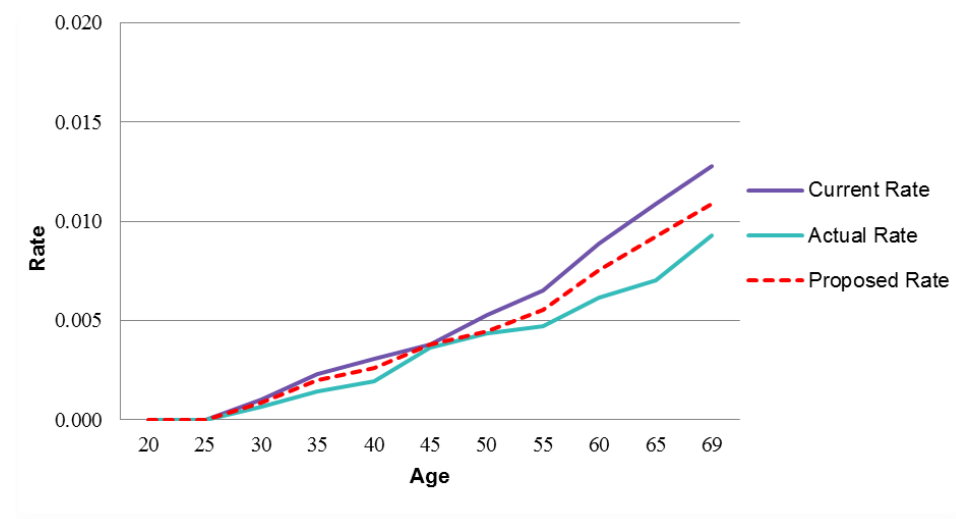
Recommendation: Decrease ordinary disability rates at all ages, except age 45. Increase accidental disability rates for ages 35 to 60.

The data for termination due to ordinary disability indicates that the number of actual disabilities was about 27% lower than that expected during the measurement period. This result is consistent with the results of the prior study, in which a significant reversal of the trend for disability retirements was first recognized. As in the prior study, we note that this continued decrease in ordinary disability retirements may be caused by the liberalization of the conditions for receiving an accidental disability pension due to the New Jersey Supreme Court ruling in the *Richardson v. Board of Trustees*. Therefore, we are recommending a further decrease in the assumed rates of ordinary disability at every age except age 45.

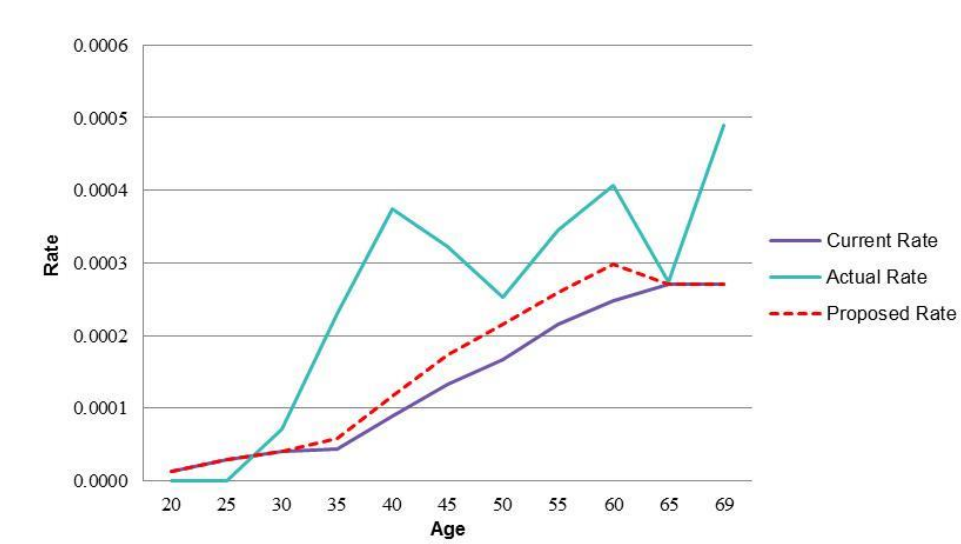
For the same reason, the data shows an increase in the actual rate of accidental disability. Therefore, we are recommending an increase in Accidental Disability rates for ages 35 to 60.

II. Local Employers (continued)

Ordinary Disability Rates



Accidental Disability Rates



II. Local Employers (continued)

c. Deferred Vested, Early, and Service Retirements

The following table presents a summary of the number of exposures, actual and expected terminations and the ratios of actual to expected terminations due to deferred vested, early, and service retirements.

Type	Central Age of Group	Number of Separations					
		Exposures	Actual	Expected		Ratio of Actual to Expected	
				Current	Proposed	Current	Proposed
Deferred Vested and Reduced Early Retirement	20	0	0	0.00	0.00	0.000	0.000
	25	57	0	0.00	0.00	0.000	0.000
	30	3,034	0	0.81	0.69	0.000	0.000
	35	10,358	1	4.17	3.54	0.240	0.282
	40	19,732	0	11.10	9.44	0.000	0.000
	45	35,426	77	84.73	72.02	0.909	1.069
	50	56,316	369	421.51	358.28	0.875	1.030
	55	60,342	338	543.08	461.62	0.622	0.732
	60	20,324	99	182.93	155.49	0.541	0.637
	Total	205,589	884	1,248.33	1,061.08	0.708	0.833
Service Retirement and Unreduced Early Retirement	55	3,248	601	380.01	380.01	1.582	1.582
	56	2,989	392	349.71	349.71	1.121	1.121
	57	2,878	346	336.73	336.73	1.028	1.028
	58	2,855	370	334.04	334.04	1.108	1.108
	59	3,209	753	673.89	673.89	1.117	1.117
	60	16,012	1,557	1,248.94	1,248.94	1.247	1.247
	61	14,340	1,229	1,204.56	1,204.56	1.020	1.020
	62	13,487	1,718	1,812.65	1,812.65	0.948	0.948
	63	11,920	1,220	1,251.60	1,251.60	0.975	0.975
	64	11,208	1,221	1,176.85	1,176.85	1.038	1.038
65	10,159	1,430	1,680.10	1,680.10	0.851	0.851	
66	8,156	1,294	1,284.57	1,284.57	1.007	1.007	
67	6,322	861	862.95	862.95	0.998	0.998	
68	5,347	680	617.57	617.57	1.101	1.101	
69	4,975	608	574.61	574.61	1.058	1.058	
Total	117,105	14,280	13,788.78	13,788.78	1.036	1.036	
Due to All Causes	Grand Total		15,164	15,037.11	14,849.86	1.008	1.021

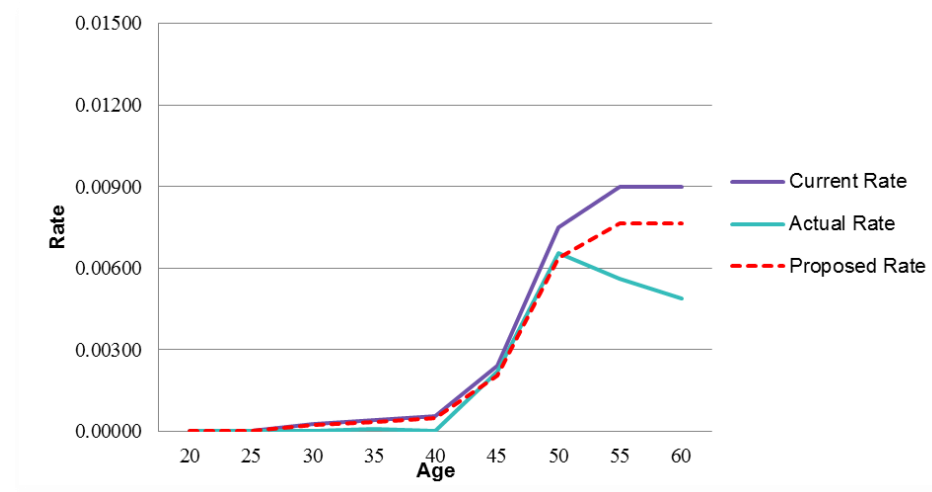
Recommendation: Decrease the deferred vested and reduced early retirement rates for all ages to reflect experience.

The rates of Deferred Vested and Reduced Early retirement were lower at every examined age and the overall rates were 29% lower than expected. We recommend decreasing rates at all ages to reflect this experience.

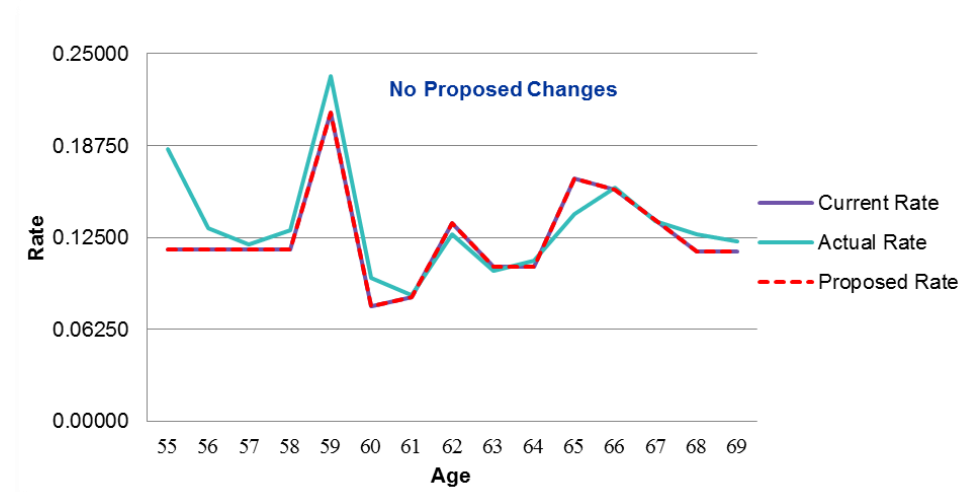
Rates of Service retirement were overall in line with what was expected. No changes are recommended at this time.

II. Local Employers (continued)

Deferred Vested and Early Retirements



Service Retirements



II. Local Employers (continued)

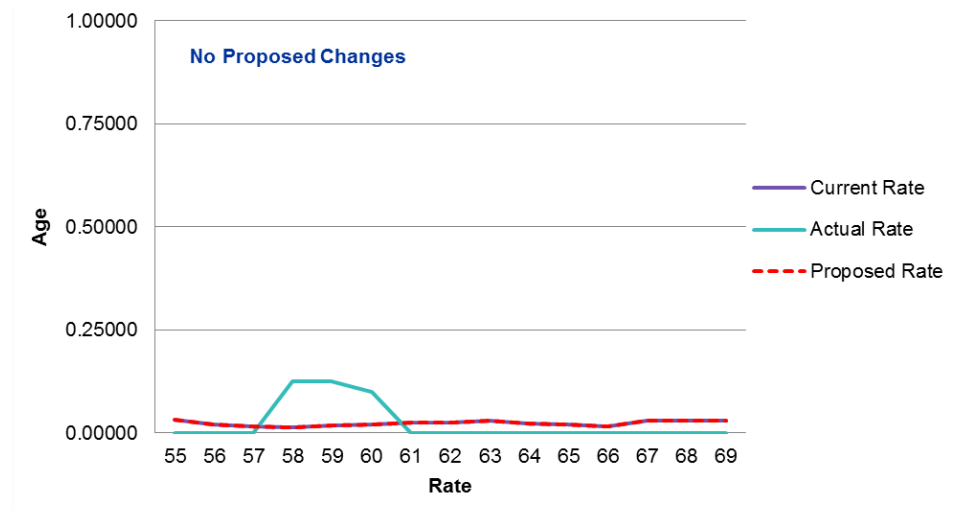
Chapter 366, P.L. 2001 provides benefits similar to those of the Police and Firemen's Retirement System (PFRS) to prosecutor members of the System who are not eligible for enrollment in PFRS. The original costs for Chapter 366 were based primarily on PERS assumptions determined in the June 30, 2002 experience 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.

d. Chapter 366, P.L. 2001 – Prosecutors Service Retirement Rates

Type	Central Age of Group	Number of Separations					
		Exposures	Actual	Expected		Ratio of Actual to	
				Current	Proposed	Current	Proposed
Age 55 with Less than 20 Years of Service	55	9	0	0.28	0.28	0.000	0.000
	56	10	0	0.21	0.21	0.000	0.000
	57	12	0	0.18	0.18	0.000	0.000
	58	16	2	0.21	0.21	9.524	9.524
	59	16	2	0.28	0.28	7.143	7.143
	60	10	1	0.21	0.21	4.762	4.762
	61	7	0	0.18	0.18	0.000	0.000
	62	5	0	0.12	0.12	0.000	0.000
	63	4	0	0.12	0.12	0.000	0.000
	64	4	0	0.09	0.09	0.000	0.000
	65	3	0	0.06	0.06	0.000	0.000
	66	2	0	0.03	0.03	0.000	0.000
	67	2	0	0.06	0.06	0.000	0.000
	68	2	0	0.06	0.06	0.000	0.000
	69	1	0	0.03	0.03	0.000	0.000
Total		103	5	2.12	2.12	2.358	2.358

Recommendation: No proposed changes

While the rate of retirement for participants over the age of 55 with less than 20 years of service is greater than expected, the overall incidence is small and within an acceptable range. We recommend no changes to this rate.



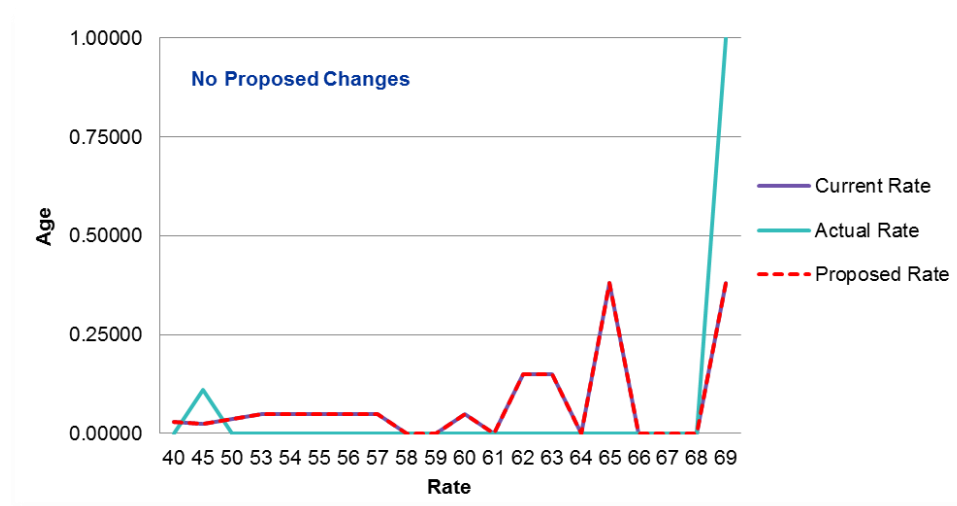
II. Local Employers (continued)

d. Chapter 366, P.L. 2001 – Prosecutors Service Retirement Rates (continued)

Type	Central Age of Group	Number of Separations					
		Exposures	Actual	Expected		Ratio of Actual to	
				Current	Proposed	Current	Proposed
With 20 Years of Service	40	1	0	0.03	0.03	0.000	0.000
	45	27	3	0.68	0.68	4.412	4.412
	50	24	0	0.90	0.90	0.000	0.000
	53	3	0	0.15	0.15	0.000	0.000
	54	2	0	0.10	0.10	0.000	0.000
	55	2	0	0.10	0.10	0.000	0.000
	56	1	0	0.05	0.05	0.000	0.000
	57	3	0	0.15	0.15	0.000	0.000
	58	0	0	0.00	0.00	0.000	0.000
	59	0	0	0.00	0.00	0.000	0.000
	60	1	0	0.05	0.05	0.000	0.000
	61	0	0	0.00	0.00	0.000	0.000
	62	1	0	0.15	0.15	0.000	0.000
	63	1	0	0.15	0.15	0.000	0.000
	64	0	0	0.00	0.00	0.000	0.000
	65	1	0	0.38	0.38	0.000	0.000
	66	0	0	0.00	0.00	0.000	0.000
	67	0	0	0.00	0.00	0.000	0.000
	68	0	0	0.00	0.00	0.000	0.000
	69	1	1	0.38	0.38	2.632	2.632
	Total	68	4	3.27	3.27	1.223	1.223

Recommendation: No proposed changes

While the rate of retirement for participants with 20 years of service is greater than expected, the overall incidence is small and within an acceptable range. We recommend no changes to this rate.

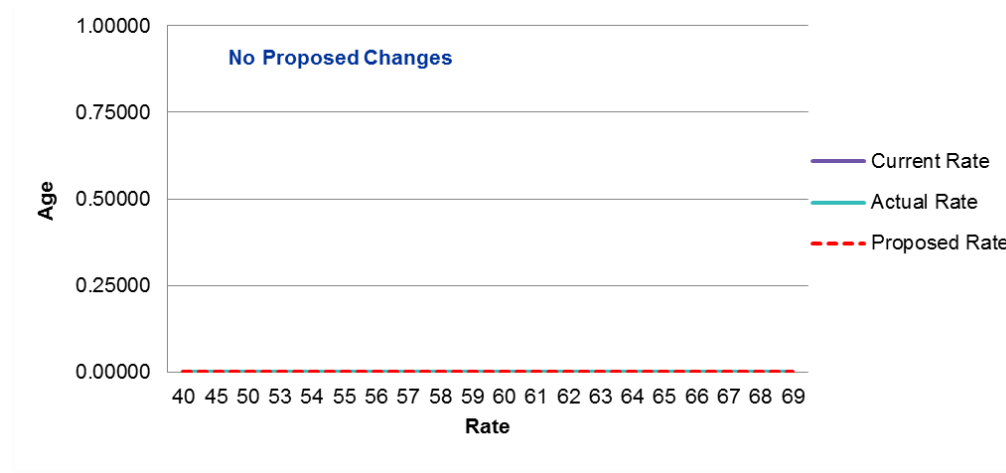


II. Local Employers (continued)

d. Chapter 366, P.L. 2001 – Prosecutors Service Retirement Rates (continued)

Type	Central Age of Group	Number of Separations					
		Exposures	Actual	Expected		Ratio of Actual to	
				Current	Proposed	Current	Proposed
With 21 to 24 Years of Service	40	0	0	0.00	0.00	0.000	0.000
	45	35	0	0.00	0.00	0.000	0.000
	50	164	0	0.00	0.00	0.000	0.000
	53	27	0	0.00	0.00	0.000	0.000
	54	14	0	0.00	0.00	0.000	0.000
	55	13	0	0.00	0.00	0.000	0.000
	56	9	0	0.00	0.00	0.000	0.000
	57	6	0	0.00	0.00	0.000	0.000
	58	5	0	0.00	0.00	0.000	0.000
	59	5	0	0.00	0.00	0.000	0.000
	60	5	0	0.00	0.00	0.000	0.000
	61	6	0	0.00	0.00	0.000	0.000
	62	4	0	0.00	0.00	0.000	0.000
	63	2	0	0.00	0.00	0.000	0.000
	64	2	0	0.00	0.00	0.000	0.000
	65	1	0	0.00	0.00	0.000	0.000
	66	2	0	0.00	0.00	0.000	0.000
	67	2	0	0.00	0.00	0.000	0.000
	68	0	0	0.00	0.00	0.000	0.000
	69	1	0	0.00	0.00	0.000	0.000
	Total	303	0	0.00	0.00	0.000	0.000

Recommendation: No proposed changes



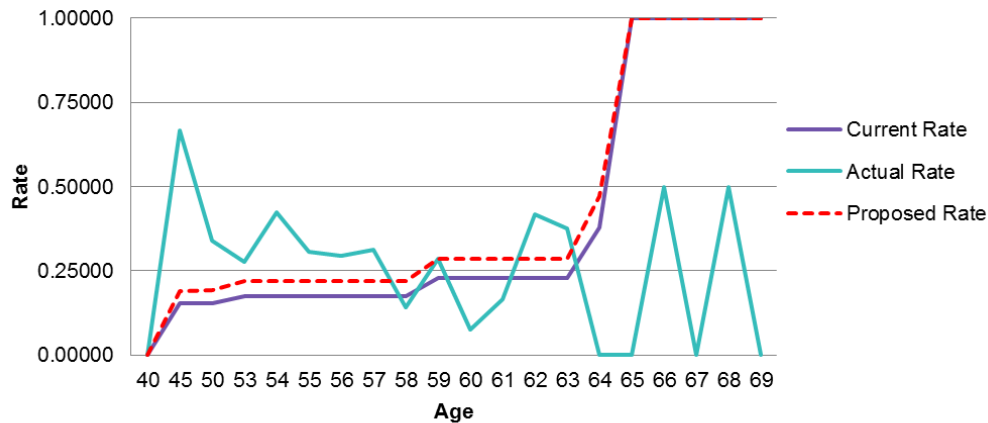
II. Local Employers (continued)

d. Chapter 366, P.L. 2001 – Prosecutors Service Retirement Rates (continued)

Type	Central Age of Group	Number of Separations					
		Exposures	Actual	Expected		Ratio of Actual to	
				Current	Proposed	Current	Proposed
With More than 24 Years of Service	40	0	0	0.00	0.00	0.000	0.000
	45	3	2	0.46	0.57	4.367	3.509
	50	94	32	14.48	18.10	2.211	1.768
	53	29	8	5.07	6.34	1.578	1.262
	54	26	11	4.55	5.69	2.418	1.933
	55	13	4	2.27	2.84	1.762	1.408
	56	17	5	2.97	3.72	1.681	1.344
	57	16	5	2.79	3.49	1.789	1.433
	58	14	2	2.45	3.06	0.816	0.654
	59	14	4	3.19	3.99	1.254	1.003
	60	13	1	2.96	3.70	0.338	0.270
	61	12	2	2.73	3.41	0.733	0.587
	62	12	5	2.73	3.41	1.832	1.466
	63	8	3	1.83	2.28	1.643	1.316
	64	5	0	1.89	2.36	0.000	0.000
	65	3	0	3.00	3.00	0.000	0.000
	66	2	1	2.00	2.00	0.500	0.500
	67	1	0	1.00	1.00	0.000	0.000
	68	2	1	2.00	2.00	0.500	0.500
	69	1	0	1.00	1.00	0.000	0.000
	Total	285	86	59.37	71.96	1.449	1.195

Recommendation: Increase rates for ages less than 65 for prosecutors with more than 24 years of service.

The rate of retirement for people with more than 24 years of service is significantly more than expected. We recommend an increase in all rates for participants under the age of 65.



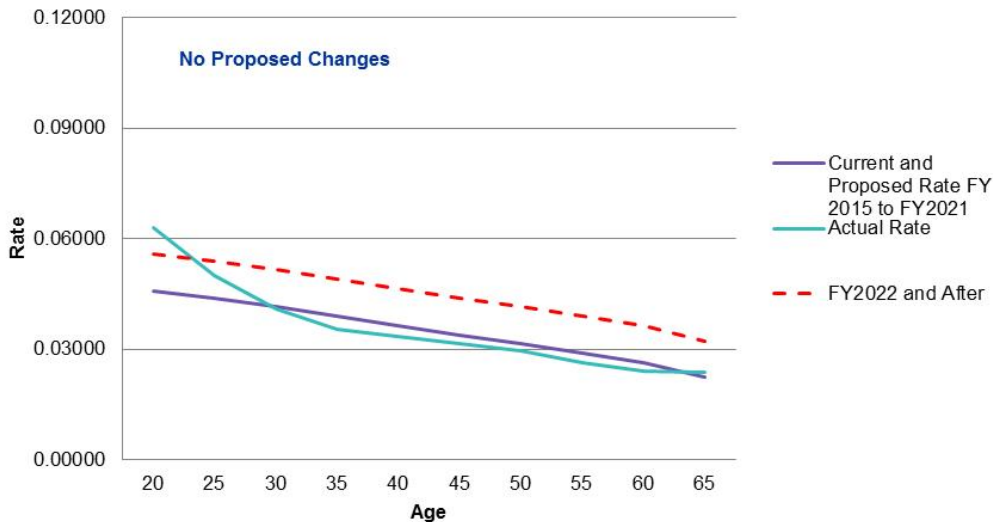
II. Local Employers (continued)

e. Salary Increase Rates

The following table presents a summary of the total salary from the prior year, actual and expected salary for the following year and the ratios of actual to expected salary among continuing actives. The table reflects the Salary experience during the period July 1, 2011 through June 30, 2014.

Central Age of Group	Salary Increase			
	Actual Salary from Previous Year	Actual	Expected	Ratio of Actual to Expected
20	44,548,033	47,356,851	46,582,251	1.017
25	576,670,694	605,460,197	601,894,444	1.006
30	1,038,124,442	1,080,448,533	1,081,150,388	0.999
35	1,242,088,008	1,286,102,563	1,290,497,003	0.997
40	1,770,257,582	1,829,425,366	1,834,652,013	0.997
45	2,783,090,155	2,870,495,880	2,877,491,391	0.998
50	3,816,083,400	3,928,455,653	3,936,138,599	0.998
55	4,064,682,155	4,171,867,209	4,182,624,892	0.997
60	3,095,424,912	3,170,269,000	3,177,048,712	0.998
65	1,564,295,979	1,601,318,592	1,599,160,154	1.001
Total	19,995,265,360	20,591,199,844	20,627,239,847	0.998

The above table shows that, in total, the annual salary increase assumption is within an acceptable range of actual experience. The current salary increase assumption reflects a 1.00% per annum increase in the salary scale for fiscal years ending 2022 and thereafter. We believe this is a reasonable assumption given the experience of the System and discussions with the Division of Pension and Benefits regarding anticipated salary growth. Therefore, we recommend no changes to the salary scale at this time. The average salary increase rate is about 3.50% until 2022. Beginning in 2022, the average salary increase rate will be about 4.50%.



B. Mortality Experience Among Active and Inactive Plan Members

Mortality Improvement

As noted in prior experience studies, we have seen continued and steady improvement in mortality rates over time. This trend is expected to continue into the future. In fact, Actuarial Standard of Practice No. 35 states that the actuary should “include an assumption as to expected mortality improvement after the measurement date.” Accordingly, in our prior experience study, we recommended the use of projection scale AA in the projection of the mortality tables to provide a generational approach toward future mortality improvements.

Since the last study, mortality improvement Scale MP-2014 has been published by the Society of Actuaries (SOA) as a tool for actuaries to project mortality improvement. The rates of mortality improvement in the US have differed quite substantially from those predicted by Scale AA. Consequently, an alternative to Scale AA, called Scale MP-2014, was developed and is recommended for use. However, for the purpose of projecting future mortality improvements, we recommend the use of the Buck adjusted projection Scale MP-2014 in the projection of the mortality tables.

Since the last experience study, the Society of Actuaries (SOA) conducted a mortality study and determined that the overall rates of mortality improvement in the US have differed from those predicted by Scale AA. Based on their study, the SOA published an updated mortality improvement projection scale, MP-2014. However, there are many who believe that the SOA’s MP-2014 scale is unduly conservative with unrealistic mortality improvement rates. Emerging experience since the data was collected by the SOA seems to support the contention. Therefore, Buck has published an alternative mortality improvement scale, the Buck Modified MP-2014. The Buck table was constructed to provide a reasonable projection scale for use by employers who believe that future mortality improvement will be lower than that predicted by the SOA’s MP-2014. The parameters used in the construction of this table were based on the mortality improvement forecasts from the Social Security Administration just as they were used by the SOA in developing MP-2014. The substantive difference between the Buck scale and that published by the SOA’s MP-2014 scale is that the Buck scale applies a 15 year period prior to reaching an ultimate improvement rate of 0.75% versus the SOA’s scale which applies a 20 year period prior to reaching an ultimate improvement rate of 1.0%. This scale is based on the SOA’s Retirement Plans Experience Committee 2014 model, which is the same methodology used for the development of the MP-2014 projection scale. The 0.75% ultimate level is reduced after age 85 to 0.60% at age 95, then to 0.0% by age 115. We recommend the use of the Buck Modified MP-2014 scale in the projection of the mortality tables.

The mortality experience for male and female service retirements and beneficiaries meets the criteria of having “credible experience” (i.e., having, at least, 1,000 expected deaths over the examination period). We recommend the RP-2000 base mortality tables with a 1 year static projection using scale AA (scale assumed from prior experience study) , and a setback 1 year for males and 1 year for females. This base mortality table will then be projected on a generational basis using the Buck Modified MP-2014 scale with base year 2013.

The mortality experience for disabled retirees and active participants eligible for ordinary death benefits is not sufficient to be considered statistically credible. However, the creation of the RP-2014 mortality tables excluded large government pension plan experience, and the unmodified tables provide a poor fit to actual experience. For disabled retirees, we recommend retaining the RP-2000 disability mortality table setback 3 years for males, and we recommend adding a 1 year setforward for females. For State active ordinary deaths, we recommend RP-2000 set back 4 years for males and females. For Local Employee active ordinary deaths, we recommend RP-2000 set back 2 years for males and 7 years for females. We recommend these tables be projected on a generational basis using the Buck Modified MP-2014 scale with base year 2013.

I. Active Mortality Experience - State

- a. Ordinary and Accidental Death Rates among Active Members

II. Active Mortality Experience - Local Employers

- a. Ordinary and Accidental Death Rates among Active Members

III. Inactive Mortality Experience - State and Local Employers

- a. Service Retirement, Early Retirement, and Deferred Vested with Benefits Payable, and Beneficiary Mortality Rates
- b. Disability Mortality Rates

I. Active Mortality Experience - State

a. Ordinary and Accidental Death Rates among Active Members

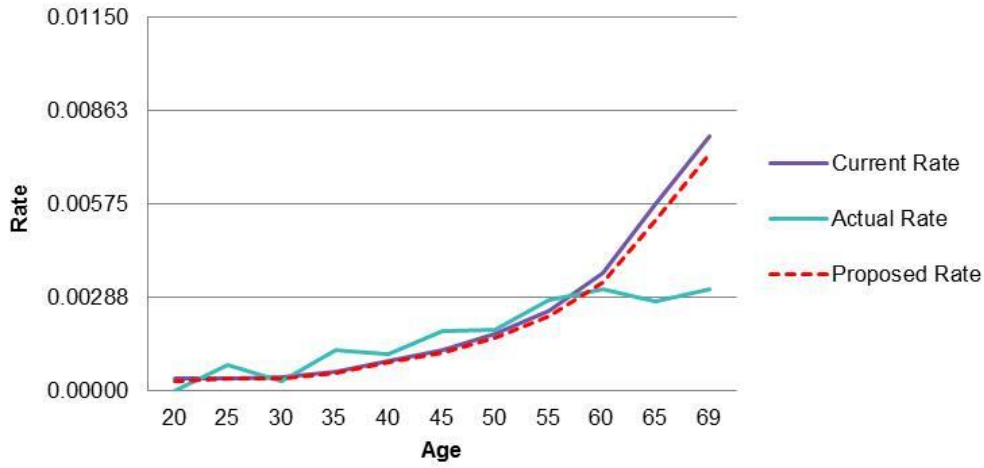
The experience for ordinary and accidental death among State active members is presented in the following tables. For ordinary death, actual deaths were about 6% lower than expected for males and 16% higher than expected for females. We recommend a change to use the RP-2000 mortality tables as the base mortality assumption at the measurement date, set back 4 years for males and 4 years for females. The base mortality table will then be projected on a generational basis using the Buck Modified MP-2014.

Ordinary Death Rates

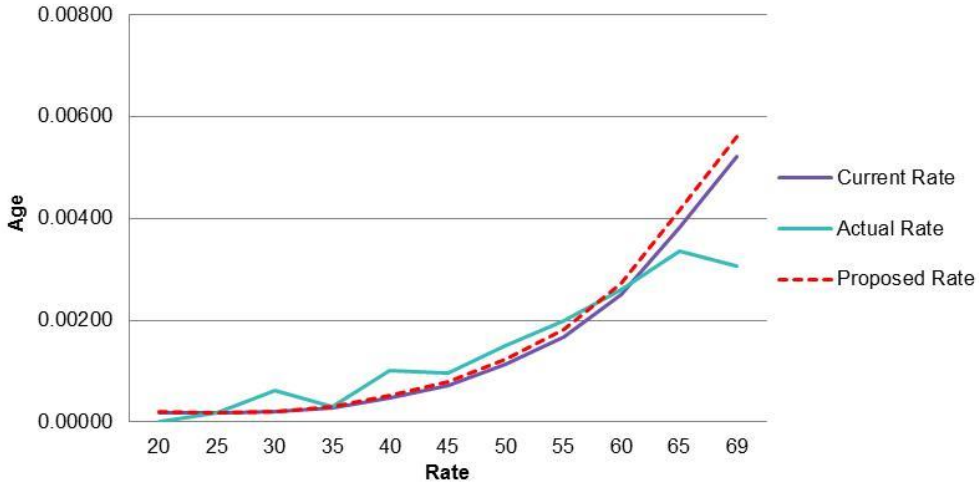
Type	Central Age of Group	Number of Separations					
		Exposures	Actual	Expected		Ratio of Actual to Expected	
				Current	Proposed	Current	Proposed
Male	20	293	0	0.10	0.08	0.000	0.000
	25	3,826	3	1.42	1.38	2.113	2.174
	30	7,503	2	2.93	2.86	0.683	0.699
	35	7,999	10	4.53	4.06	2.208	2.463
	40	8,958	10	8.14	7.56	1.229	1.323
	45	11,602	21	14.34	13.45	1.464	1.561
	50	15,070	28	26.39	24.57	1.061	1.140
	55	16,306	45	40.07	37.40	1.123	1.203
	60	12,886	40	46.66	42.62	0.857	0.939
	65	6,954	19	39.84	36.29	0.477	0.524
	69	1,290	4	10.11	9.41	0.396	0.425
	Total	92,687	182	194.53	179.68	0.936	1.013
Female	20	288	0	0.05	0.06	0.000	0.000
	25	5,693	1	1.10	1.10	0.909	0.909
	30	14,638	9	3.08	3.19	2.922	2.821
	35	16,461	5	4.58	5.10	1.092	0.980
	40	16,810	17	8.07	8.75	2.107	1.943
	45	21,614	21	15.60	17.07	1.346	1.230
	50	25,862	39	29.28	31.85	1.332	1.224
	55	25,228	50	42.31	45.81	1.182	1.091
	60	18,515	48	46.38	50.58	1.035	0.949
	65	9,506	32	36.30	39.56	0.882	0.809
	69	1,631	5	8.51	9.15	0.588	0.546
	Total	156,246	227	195.26	212.22	1.163	1.070
	Grand Total	248,933	409	389.79	391.90	1.049	1.044

I. Active Mortality Experience – State (continued)

Ordinary Death Rates Among Male Active Members



Ordinary Death Rates Among Female Active Members

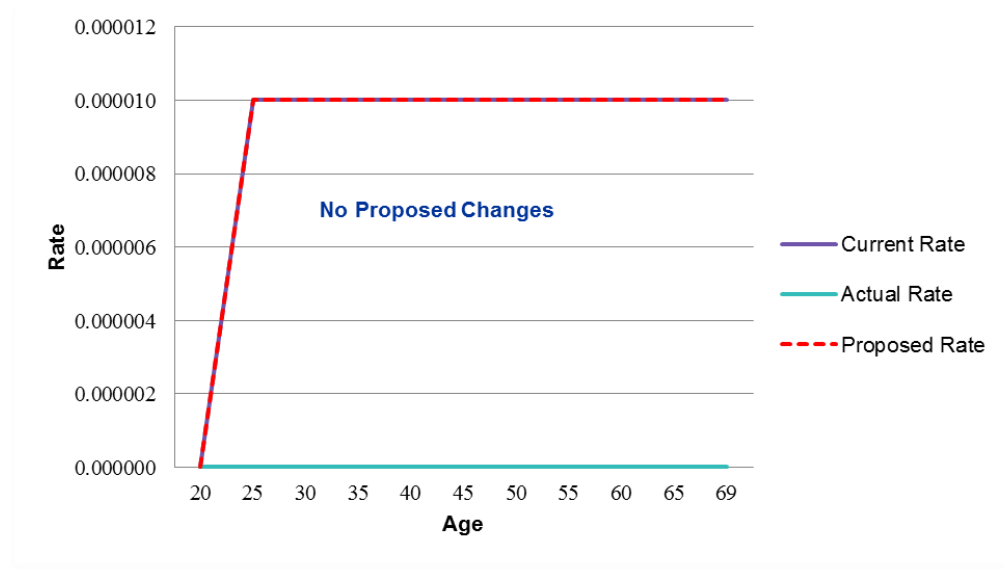


I. Active Mortality Experience – State (continued)

Accidental Death Rates

No change is recommended in the accidental death rates since the experience is close to what was expected relative to the small incidence of this event.

Type	Central Age of Group	Number of Separations					
		Exposures	Actual	Expected		Ratio of Actual to Expected	
				Current	Proposed	Current	Proposed
Male and Female	20	581	0	0.00	0.00	0.000	0.000
	25	9,519	0	0.09	0.09	0.000	0.000
	30	22,141	0	0.23	0.23	0.000	0.000
	35	24,460	0	0.25	0.25	0.000	0.000
	40	25,768	0	0.25	0.25	0.000	0.000
	45	33,216	0	0.33	0.33	0.000	0.000
	50	40,932	0	0.39	0.39	0.000	0.000
	55	41,534	0	0.40	0.40	0.000	0.000
	60	31,401	0	0.30	0.30	0.000	0.000
	65	16,460	0	0.16	0.16	0.000	0.000
	69	2,921	0	0.03	0.03	0.000	0.000
	Total		248,933	0	2.43	2.43	0.000



II. Active Mortality Experience – Local Employers

a. Ordinary and Accidental Death Rates among Active Members

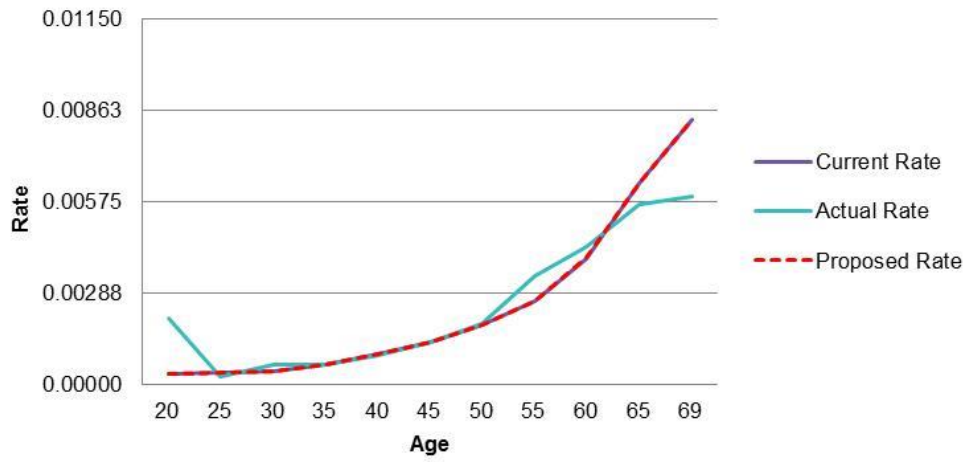
The experience for ordinary and accidental death among Local active members is presented in the following tables. For ordinary death, actual deaths were about 5% higher than expected for males and were as expected for females. We recommend a change to use the RP-2000 mortality tables as the base mortality assumption at the measurement date, set back 2 years for males and 7 years for females. The base mortality table will then be projected on a generational basis using the Buck Modified MP-2014.

Ordinary Death Rates

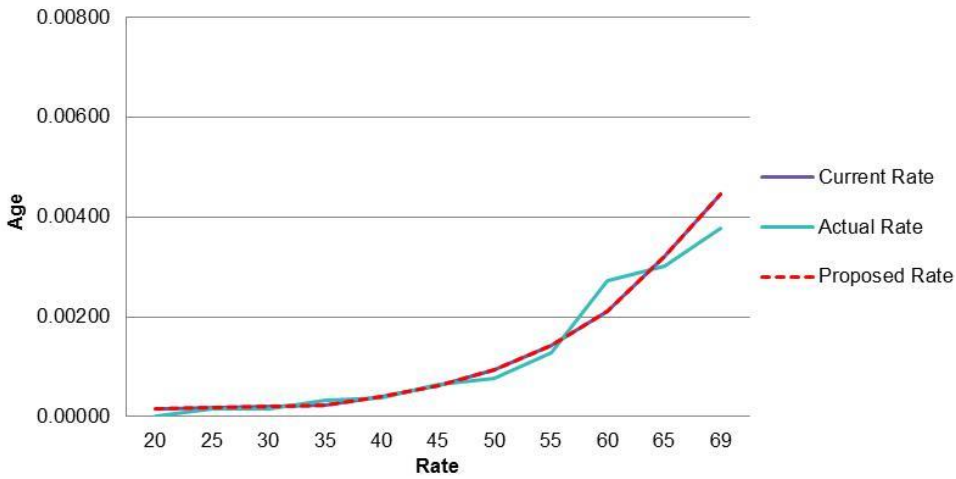
Type	Central Age of Group	Number of Separations					
		Exposures	Actual	Expected		Ratio of Actual to Expected	
				Current	Proposed	Current	Proposed
Male	20	1,435	3	0.48	0.48	6.250	6.250
	25	11,435	3	4.25	4.25	0.706	0.706
	30	15,597	10	6.27	6.27	1.595	1.595
	35	15,547	10	9.85	9.85	1.015	1.015
	40	19,775	18	19.24	19.24	0.936	0.936
	45	28,176	38	37.36	37.32	1.017	1.018
	50	36,271	70	68.09	68.05	1.028	1.029
	55	36,679	126	96.60	96.57	1.304	1.305
	60	29,237	127	116.40	116.42	1.091	1.091
	65	17,753	101	112.37	112.37	0.899	0.899
	69	4,228	25	35.31	35.27	0.708	0.709
	Total	216,133	531	506.22	506.09	1.049	1.049
Female	20	1,034	0	0.17	0.17	0.000	0.000
	25	12,601	2	2.37	2.36	0.844	0.847
	30	17,733	3	3.52	3.52	0.852	0.852
	35	18,394	6	4.37	4.36	1.373	1.376
	40	26,441	10	10.70	10.68	0.935	0.936
	45	44,101	28	27.03	27.01	1.036	1.037
	50	62,514	48	59.43	59.38	0.808	0.808
	55	67,595	86	97.17	97.17	0.885	0.885
	60	53,443	145	113.41	113.42	1.279	1.278
	65	30,201	91	97.25	97.26	0.936	0.936
	69	6,094	23	27.20	27.19	0.846	0.846
	Total	340,151	442	442.62	442.52	0.999	0.999
	Grand Total	556,284	973	948.84	948.61	1.025	1.026

II. Active Mortality Experience – Local Employers (continued)

Ordinary Death Rates Among Male Active Members



Ordinary Death Rates Among Female Active Members

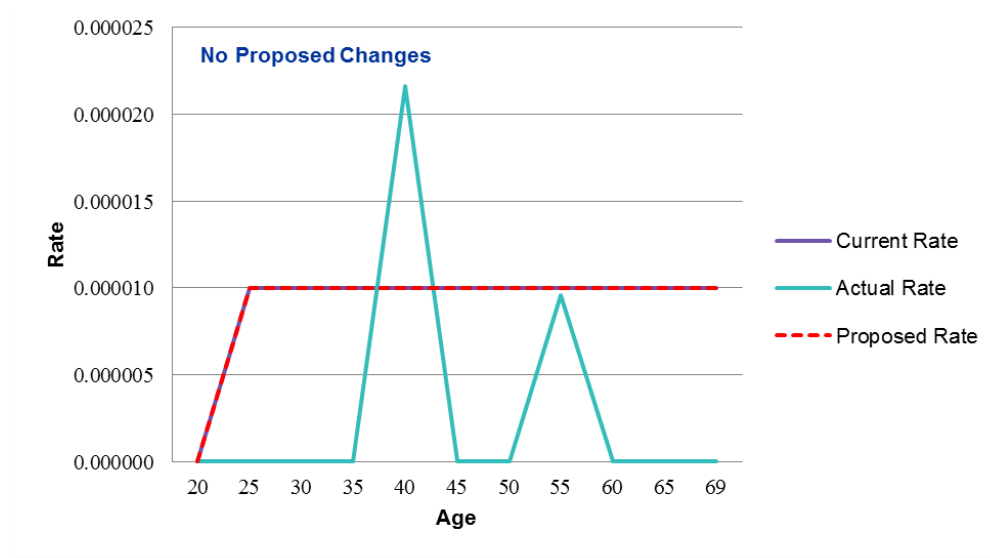


II. Active Mortality Experience – Local Employers (continued)

Accidental Death Rates

No change is recommended in the accidental death rates since the experience is close to what was expected relative to the small incidence of this event.

Type	Central Age of Group	Number of Separations					
		Exposures	Actual	Expected		Ratio of Actual to Expected	
				Current	Proposed	Current	Proposed
Male and Female	20	2,469	0	0.01	0.01	0.000	0.000
	25	24,036	0	0.24	0.24	0.000	0.000
	30	33,330	0	0.33	0.33	0.000	0.000
	35	33,941	0	0.34	0.34	0.000	0.000
	40	46,216	1	0.46	0.46	2.174	2.174
	45	72,277	0	0.71	0.71	0.000	0.000
	50	98,785	0	0.99	0.99	0.000	0.000
	55	104,274	1	1.05	1.05	0.952	0.952
	60	82,680	0	0.80	0.80	0.000	0.000
	65	47,954	0	0.48	0.48	0.000	0.000
	69	10,322	0	0.10	0.10	0.000	0.000
	Total		556,284	2	5.51	5.51	0.363



III. Inactive Mortality Experience - State and Local Employers

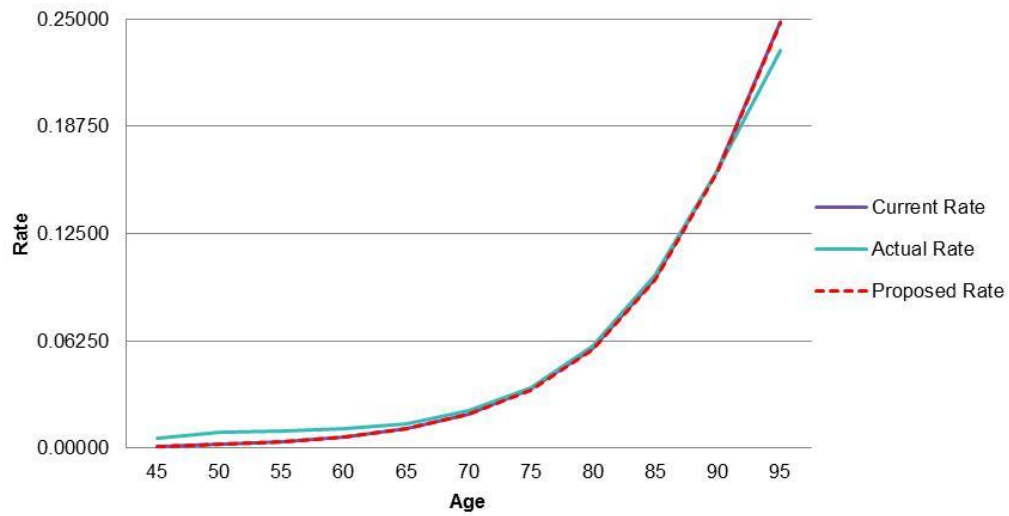
a. Service Retirement, Early Retirement, Deferred Vested with Benefits Payable, and Beneficiary Mortality Rates

The experience indicates that actual deaths among retirees were well within acceptable limits for both male and female retirees. We recommend no change from the RP-2000 base mortality tables, however we propose a 1 year static projection using scale AA, and a setback 1 year for males and 1 year for females. This base mortality table will then be projected on a generational basis using the Buck Modified MP-2014 projection scale with base year 2013.

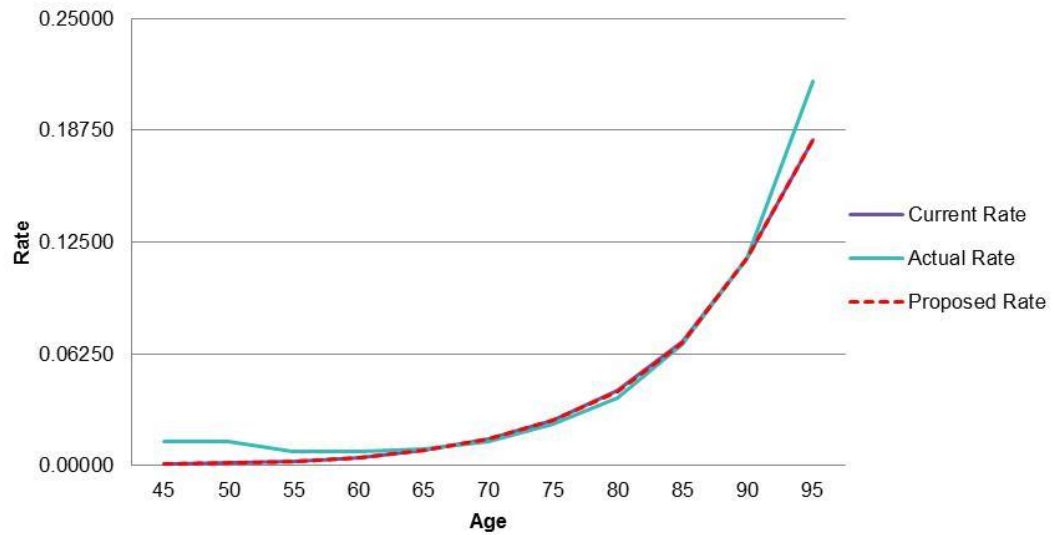
Type	Central Age of Group	Number of Separations					
		Exposures	Actual	Expected		Ratio of Actual to	
				Current	Proposed	Current	Proposed
Male	45 and under	525	3	0.60	0.56	5.000	5.357
	50	1,376	13	2.95	2.88	4.407	4.514
	55	5,915	59	21.06	20.64	2.802	2.859
	60	15,490	182	98.00	96.45	1.857	1.887
	65	30,188	437	347.96	343.32	1.256	1.273
	70	28,677	631	572.93	565.02	1.101	1.117
	75	24,294	857	828.76	816.78	1.034	1.049
	80	21,006	1,243	1,221.43	1208.06	1.018	1.029
	85	15,379	1,545	1,517.11	1505.95	1.018	1.026
	90	7,459	1,200	1,204.68	1198.86	0.996	1.001
	95 and over	2,358	546	585.40	583.98	0.933	0.935
	Total	152,667	6,716	6,400.88	6,342.50	1.049	1.059
Female	45 and under	1,048	14	0.86	0.80	16.279	17.500
	50	2,015	27	3.29	3.22	8.207	8.385
	55	7,988	64	21.05	20.85	3.040	3.070
	60	21,026	164	100.52	100.05	1.632	1.639
	65	44,898	419	397.44	395.52	1.054	1.059
	70	50,403	668	761.47	757.64	0.877	0.882
	75	43,349	998	1,108.07	1100.06	0.901	0.907
	80	39,999	1,511	1,672.32	1660.61	0.904	0.910
	85	32,070	2,179	2,223.24	2209.22	0.980	0.986
	90	18,953	2,198	2,199.84	2192.52	0.999	1.002
	95 and over	6,950	1491	1267.78	1265.30	1.176	1.178
	Total	268,699	9,733	9,755.88	9,705.79	0.998	1.003

III. Inactive Mortality Experience - State and Local Employers (continued)

Male



Female



III. Inactive Mortality Experience - State and Local Employers (continued)

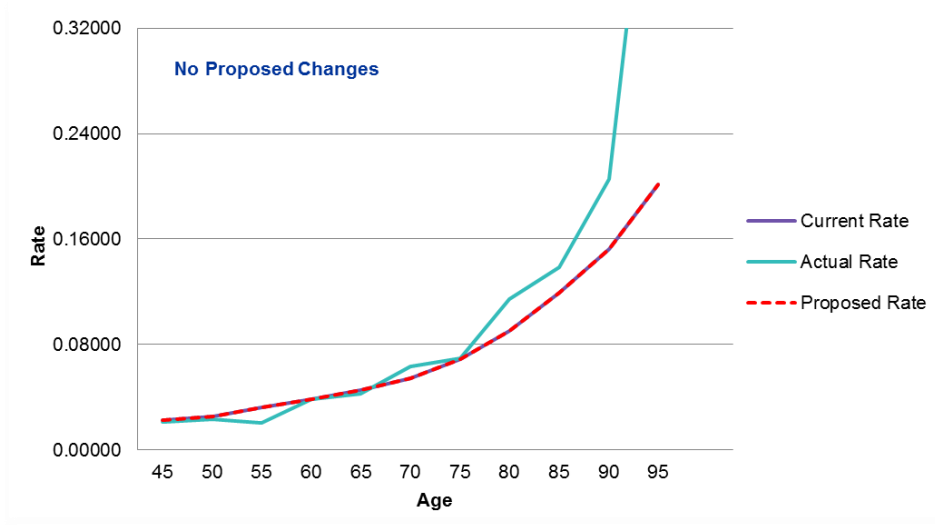
b. Disability Mortality Rates

The experience indicates that actual deaths among disabled retirees were well within acceptable limits for male and was higher than expected for females. We recommend no changes from the current RP-2000 Disability Mortality Table with a 3 year setback for males. We recommend keeping the RP-2000 base table for females, but include a 1 year setforward.

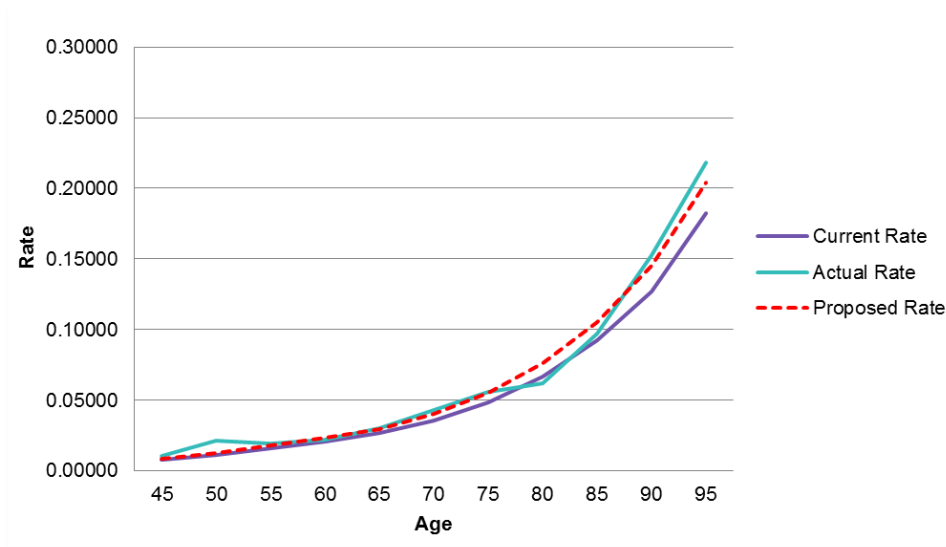
Type	Central Age of Group	Number of Separations					
		Exposures	Actual	Expected		Ratio of Actual to Expected	
				Current	Proposed	Current	Proposed
Male	45 and under	1,006	21	22.71	22.71	0.925	0.925
	50	1,657	38	42.11	42.11	0.902	0.902
	55	2,273	46	72.11	72.11	0.638	0.638
	60	2,745	105	104.62	104.62	1.004	1.004
	65	3,136	133	141.06	141.06	0.943	0.943
	70	2,547	161	138.32	138.32	1.164	1.164
	75	1,738	121	119.97	119.97	1.009	1.009
	80	990	113	89.44	89.44	1.263	1.263
	85	397	55	47.36	47.36	1.161	1.161
	90	141	29	21.47	21.47	1.351	1.351
	95 and over	17	9	3.42	3.42	2.632	2.632
	Total	16,647	831	802.59	802.59	1.035	1.035
Female	45 and under	922	10	7.01	7.65	1.427	1.307
	50	1,648	35	17.98	21.04	1.947	1.663
	55	2,911	56	45.71	51.80	1.225	1.081
	60	3,683	81	76.81	84.94	1.055	0.954
	65	4,486	136	119.71	133.30	1.136	1.020
	70	4,136	178	145.90	165.62	1.220	1.075
	75	2,656	149	128.46	146.51	1.160	1.017
	80	1,271	79	85.05	96.81	0.929	0.816
	85	544	53	50.09	57.19	1.058	0.927
	90	164	25	20.84	23.82	1.200	1.050
	95 and over	55	12	10.03	11.21	1.196	1.070
	Total	22,476	814	707.59	799.89	1.150	1.018

III. Inactive Mortality Experience - State and Local Employers (continued)

Male Disability Mortality



Female Disability Mortality



IV. Summary of Proposed Assumptions

As noted earlier in the report, the experience investigation for the period from July 1, 2011 to June 30, 2014 indicates the need for certain changes in the tables used for determining the liabilities of the System. The proposed changes are summarized as follows:

Rates	Proposed Changes	
	State	Local Employers
Withdrawal Rates		
Withdrawal prior to eligibility for a benefit during first year of employment	Adjust ¹	Adjust ⁶
Withdrawal prior to eligibility for a benefit during second year of employment	No Change	No Change
Withdrawal prior to eligibility for a benefit during third year of employment	No Change	Adjust ⁷
Withdrawal after the first three years of employment (ultimate withdrawal)	No Change	Adjust ⁸
Ordinary Disability	Adjust ²	Adjust ⁹
Accidental Disability	Adjust ³	Adjust ¹⁰
Deferred Vested and Early Retirement	Adjust ⁴	Decrease
Service Retirement	Adjust ⁵	No Change
Chapter 366, P.L. 2001		
Age 55 with less than 20 years of service	No Change	No Change
With 20 years of service	No Change	No Change
With 21 to 24 years of service	No Change	No Change
With more than 24 years of service	No Change	Adjust ¹¹
Salary Increase	No Change	No Change
Ordinary Death		
Male	Change to Standard Table ¹²	Change to Standard Table ¹³
Female	Change to Standard Table ¹²	Change to Standard Table ¹³
Accidental Death	No Change	No Change
State and Local Employers Combined		
Inactive Mortality		
Service Retirement, Early Retirement, Deferred Vested with Benefits Payable, and Beneficiary Mortality Rates	Change to adjusted Standard Table ¹⁴	
Disability Mortality Rates	Adjust ¹⁵	

1. Increase rate for ages 25-60.

2. Decrease rate for ages 35-69.

3. Increase rate for ages 25-55.

4. Decrease rate for ages 55-60.

5. Decrease rate for ages 62-65.

6. Increase rate for ages 20-55.

7. Increase rate for ages 30-55.

8. Increase rate for ages 35-40 and 50-55.

9. Decrease rate for all ages, except age 45.

10. Increase rate for ages 35-60.

11. Increase rate for ages 45-64.

12. RP-2000 Pre-Retirement mortality setback 4 years for males and 4 years for females. In addition, the base table will be projected from 2013 on a generational basis using Buck modified MP-2014 projection scale.

13. RP-2000 Pre-Retirement mortality setback 2 years for males and 7 years for females. In addition, the base table will be projected from 2013 on a generational basis using Buck modified MP-2014 projection scale.

14. RP-2000 Combined mortality with a year static projection using scale AA, setback 1 year for males and 1 year for females. In addition, the base table will be projected from 2013 on a generational basis using Buck modified MP-2014 projection scale.

15. RP-2000 Disability mortality setback 3 years for males and set forward 1 year for females.

V. Cost Impact of the Proposed Assumptions

The overall effect of the proposed changes in assumptions would be to decrease the normal contribution and increase the accrued liability payment for both State and Municipalities & Local Groups. The following chart presents a summary of the liabilities and contributions under the current and proposed assumptions using the July 2014 valuation results:

	State		Local Employers	
	Current	Proposed	Current	Proposed
Actuarial Accrued Liability	\$ 20,842,690,918	\$ 20,879,552,053	\$ 28,255,077,220	\$ 28,384,863,880
Additional Accrued Liability		\$ 36,861,135		\$ 129,786,660
Unfunded Accrued Liability/(Surplus)	\$ 11,714,454,920	\$ 11,751,316,055	\$ 7,488,413,424	\$ 7,618,200,084
Funded Ratio				
Market Value of Assets	42.12%	42.04%	71.67%	71.34%
Actuarial Value of Assets	43.80%	43.72%	73.50%	73.16%
Recommended Contribution*:				
Normal Cost				
(i) Basic	\$ 110,404,234	\$ 109,041,218	\$ 145,548,837	\$ 144,859,032
(ii) Chapters 133, 259 and 366	\$ 32,563,857	\$ 30,574,183	\$ 47,272,635	\$ 47,538,734
Accrued Liability Payment				
(i) Basic/COLA	\$ 1,028,622,159	\$ 1,031,802,528	\$ 670,490,376	\$ 681,527,254
(ii) Chapters 259 and 366	\$ 2,376,681	\$ 2,376,681	\$ 8,001,546	\$ 8,001,546
(iii) ERI Contributions	N/A	N/A	\$ 11,866,838	\$ 11,866,838
(iv) Chapter 19	N/A	N/A	\$ 8,638,962	\$ 8,638,962
Total Legislation Offsets	\$ 8,071,825	\$ 8,337,924	\$ (55,274,181)	\$ (55,540,280)
Total Contributions	\$ 1,182,038,756	\$ 1,182,132,534	\$ 836,545,013	\$ 846,892,086
Additional Annual Contribution**		\$ 93,778		\$ 10,347,073

Appendix A. Comparison of Actual, Current and Proposed Rates of Separation and Mortality

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

I. State

a. Withdrawal Rates

Withdrawals During First Year of Employment

Central Age of Group	Actual Rate	Current Rate	Proposed Rate
20	0.2441	0.2890	0.2890
25	0.4826	0.2890	0.3612
30	0.6135	0.2890	0.3612
35	0.4297	0.2133	0.2666
40	0.3544	0.1736	0.2170
45	0.2954	0.1633	0.2041
50	0.3135	0.1633	0.2041
55	0.3316	0.1633	0.2041
60	0.3019	0.1633	0.2041

Withdrawals During Second Year of Employment

Central Age of Group	Actual Rate	Current Rate	Proposed Rate
20	0.0606	0.1353	0.1353
25	0.0659	0.1353	0.1353
30	0.0602	0.1353	0.1353
35	0.0609	0.1113	0.1113
40	0.0887	0.0888	0.0888
45	0.0812	0.0826	0.0826
50	0.0587	0.0765	0.0765
55	0.0823	0.0765	0.0765
60	0.0470	0.0765	0.0765

Withdrawals During Third Year of Employment

Central Age of Group	Actual Rate	Current Rate	Proposed Rate
20	0.0261	0.0952	0.0952
25	0.0807	0.0952	0.0952
30	0.0994	0.0952	0.0952
35	0.0960	0.0823	0.0823
40	0.0809	0.0639	0.0639
45	0.0928	0.0579	0.0579
50	0.0553	0.0521	0.0521
55	0.0973	0.0521	0.0521
60	0.0541	0.0521	0.0521

I. State (continued)

Ultimate Rates of Withdrawal

Central Age of Group	Actual Rate	Current Rate	Proposed Rate
20	0.0143	0.0448	0.0448
25	0.0406	0.0448	0.0448
30	0.0360	0.0396	0.0396
35	0.0280	0.0300	0.0300
40	0.0188	0.0173	0.0173
45	0.0144	0.0130	0.0130
50	0.0095	0.0090	0.0090
55	0.0111	0.0088	0.0088
60	0.0106	0.0088	0.0088

b. Ordinary and Accidental Disability Rates

Ordinary Disability Rates

Central Age of Group	Actual Rate	Current Rate	Proposed Rate
20	0.00000	0.00005	0.00005
25	0.00000	0.00008	0.00008
30	0.00245	0.00091	0.00091
35	0.00173	0.00234	0.00210
40	0.00325	0.00347	0.00312
45	0.00350	0.00500	0.00400
50	0.00470	0.00598	0.00479
55	0.00445	0.00699	0.00560
60	0.00708	0.01180	0.00944
65	0.00843	0.01503	0.01202
69	0.00655	0.01731	0.01385

Accidental Disability Rates

Central Age of Group	Actual Rate	Current Rate	Proposed Rate
20	0.00000	0.00001	0.00001
25	0.00019	0.00001	0.00001
30	0.00000	0.00003	0.00004
35	0.00009	0.00009	0.00011
40	0.00050	0.00017	0.00020
45	0.00044	0.00019	0.00023
50	0.00058	0.00030	0.00036
55	0.00049	0.00039	0.00047
60	0.00039	0.00041	0.00041
65	0.00043	0.00060	0.00060
69	0.00035	0.00062	0.00062

I. State (continued)

c. Deferred Vested, Early, and Service Retirement Rates

Deferred Vested and Early Retirement Rates

Central Age of Group	Actual Rate	Current Rate	Proposed Rate
20	0.0000	0.0000	0.0000
25	0.0000	0.0000	0.0000
30	0.0000	0.0000	0.0000
35	0.0000	0.0005	0.0005
40	0.0002	0.0006	0.0006
45	0.0032	0.0032	0.0032
50	0.0120	0.0110	0.0110
55	0.0136	0.0150	0.0143
60	0.0028	0.0150	0.0090

Service Retirements

Central Age of Group	Actual Rate	Current Rate	Proposed Rate
55	0.1884	0.1750	0.1750
56	0.1196	0.1400	0.1400
57	0.1177	0.1300	0.1300
58	0.1252	0.1300	0.1300
59	0.1957	0.1900	0.1900
60	0.1055	0.0900	0.0900
61	0.0883	0.0900	0.0900
62	0.1262	0.1620	0.1458
63	0.1071	0.1260	0.1134
64	0.1099	0.1350	0.1215
65	0.1546	0.1800	0.1620
66	0.1672	0.1700	0.1700
67	0.1398	0.1500	0.1500
68	0.1314	0.1500	0.1500
69	0.1278	0.1500	0.1500

I. State (continued)

d. Chapter 366, P.L. 2001 – Prosecutors Service Retirement Rates

Age 55 with Less Than 20 Years of Service

Central Age of Group	Actual Rate	Current Rate	Proposed Rate
55	0.0000	0.0259	0.0259
56	0.0000	0.0259	0.0259
57	0.0000	0.0259	0.0259
58	0.0000	0.0263	0.0263
59	0.0000	0.0263	0.0263
60	0.0000	0.0263	0.0263
61	0.0000	0.0263	0.0263
62	0.0000	0.0263	0.0263
63	0.0000	0.0263	0.0263
64	0.0000	0.0263	0.0263
65	0.5000	0.0263	0.0263
66	0.0000	0.0263	0.0263
67	0.0000	0.0263	0.0263
68	0.0000	0.0263	0.0263
69	0.0000	0.0263	0.0263

With 20 Years of Service

Central Age of Group	Actual Rate	Current Rate	Proposed Rate
40	0.0000	0.0200	0.0200
45	0.0000	0.0250	0.0250
50	0.1667	0.0375	0.0375
53	0.0000	0.0500	0.0500
54	0.0000	0.0500	0.0500
55	0.0000	0.0500	0.0500
56	0.0000	0.0500	0.0500
57	0.0000	0.0500	0.0500
58	0.0000	0.0500	0.0500
59	0.0000	0.0500	0.0500
60	0.0000	0.0500	0.0500
61	0.0000	0.0500	0.0500
62	0.0000	0.1500	0.1500
63	0.0000	0.1500	0.1500
64	0.5000	0.3750	0.3750
65	1.0000	0.3750	0.3750
66	0.0000	0.3750	0.3750
67	1.0000	0.3750	0.3750
68	0.0000	0.3750	0.3750
69	0.0000	0.3750	0.3750

I. State (continued)

d. Chapter 366, P.L. 2001 – Prosecutors Service Retirement Rates (continued)

With 21 to 24 Years of Service

Central Age of Group	Actual Rate	Current Rate	Proposed Rate
40	0.0000	0.0000	0.0000
45	0.0000	0.0000	0.0000
50	0.0000	0.0000	0.0000
53	0.0000	0.0000	0.0000
54	0.0000	0.0000	0.0000
55	0.0000	0.0000	0.0000
56	0.0000	0.0000	0.0000
57	0.0000	0.0000	0.0000
58	0.0000	0.0000	0.0000
59	0.0000	0.0000	0.0000
60	0.0000	0.0000	0.0000
61	0.0000	0.0000	0.0000
62	0.0000	0.0000	0.0000
63	0.0000	0.0000	0.0000
64	0.0000	0.0000	0.0000
65	0.0000	0.0000	0.0000
66	0.0000	0.0000	0.0000
67	0.0000	0.0000	0.0000
68	0.0000	0.0000	0.0000
69	0.0000	0.0000	0.0000

With More Than 24 Years of Service

Central Age of Group	Actual Rate	Current Rate	Proposed Rate
40	0.0000	0.2310	0.2310
45	0.0000	0.2310	0.2310
50	0.2308	0.2310	0.2310
53	0.2857	0.2622	0.2622
54	0.5714	0.2622	0.2622
55	0.4000	0.2622	0.2622
56	0.3333	0.2622	0.2622
57	0.2000	0.2622	0.2622
58	0.1667	0.2622	0.2622
59	0.2000	0.3417	0.3417
60	0.0000	0.3417	0.3417
61	0.0000	0.3417	0.3417
62	0.0000	0.3417	0.3417
63	0.0000	0.3417	0.3417
64	0.0000	0.5670	0.5670
65	0.0000	1.0000	1.0000
66	1.0000	1.0000	1.0000
67	0.0000	1.0000	1.0000
68	0.0000	1.0000	1.0000
69	0.0000	1.0000	1.0000

I. State (continued)

e. Salary Increase Rates

Central Age of Group	Actual Rate	Current Rate	Proposed Rate
20	0.04645	0.04625	0.04625
25	0.04734	0.04400	0.04400
30	0.04029	0.04150	0.04150
35	0.03255	0.03900	0.03900
40	0.02450	0.03650	0.03650
45	0.01975	0.03400	0.03400
50	0.01723	0.03150	0.03150
55	0.01607	0.02900	0.02900
60	0.01510	0.02620	0.02620
65	0.01432	0.02210	0.02210

II. Local Employers

a. Withdrawal Rates

Withdrawals During First Year of Employment

Central Age of Group	Actual Rate	Current Rate	Proposed Rate
20	0.4788	0.3215	0.4019
25	0.5884	0.3215	0.4019
30	0.5899	0.3114	0.3893
35	0.5379	0.2714	0.3392
40	0.4802	0.2568	0.3210
45	0.4702	0.2480	0.3099
50	0.4372	0.2275	0.2844
55	0.4214	0.2237	0.2796
60	0.3642	0.2237	0.2237

Withdrawals During Second Year of Employment

Central Age of Group	Actual Rate	Current Rate	Proposed Rate
20	0.1286	0.1512	0.1512
25	0.1406	0.1512	0.1512
30	0.1751	0.1471	0.1471
35	0.1327	0.1193	0.1193
40	0.1337	0.1054	0.1054
45	0.1306	0.1007	0.1007
50	0.1300	0.0961	0.0961
55	0.1230	0.0940	0.0940
60	0.0818	0.0940	0.0940

Withdrawals During Third Year of Employment

Central Age of Group	Actual Rate	Current Rate	Proposed Rate
20	0.1343	0.1219	0.1219
25	0.1563	0.1219	0.1219
30	0.1651	0.1114	0.1336
35	0.1316	0.0847	0.1101
40	0.1048	0.0764	0.1070
45	0.1111	0.0713	0.1034
50	0.0981	0.0662	0.0960
55	0.1110	0.0639	0.0927
60	0.0181	0.0645	0.0682

II. Local Employers (continued)

Ultimate Rates of Withdrawal

Central Age of Group	Actual Rate	Current Rate	Proposed Rate
20	0.0376	0.0631	0.0631
25	0.0689	0.0631	0.0631
30	0.0623	0.0606	0.0606
35	0.0444	0.0391	0.0411
40	0.0319	0.0277	0.0291
45	0.0262	0.0242	0.0242
50	0.0213	0.0190	0.0199
55	0.0176	0.0154	0.0161
60	0.0141	0.0152	0.0152

b. Ordinary and Accidental Disability Rates

Ordinary Disability Rates

Central Age of Group	Actual Rate	Current Rate	Proposed Rate
20	0.00000	0.00000	0.00000
25	0.00000	0.00000	0.00000
30	0.00066	0.00081	0.00069
35	0.00145	0.00224	0.00191
40	0.00193	0.00300	0.00255
45	0.00361	0.00375	0.00375
50	0.00437	0.00522	0.00444
55	0.00469	0.00653	0.00555
60	0.00615	0.00896	0.00762
65	0.00702	0.01104	0.00938
69	0.00927	0.01280	0.01088

Accidental Disability Rates

Central Age of Group	Actual Rate	Current Rate	Proposed Rate
20	0.00000	0.00001	0.00001
25	0.00000	0.00003	0.00003
30	0.00007	0.00004	0.00004
35	0.00023	0.00004	0.00006
40	0.00037	0.00009	0.00012
45	0.00032	0.00013	0.00017
50	0.00025	0.00017	0.00022
55	0.00034	0.00022	0.00026
60	0.00041	0.00025	0.00030
65	0.00027	0.00027	0.00027
69	0.00049	0.00027	0.00027

II. Local Employers (continued)

c. Deferred Vested, Early, and Service Retirement Rates

Deferred Vested and Early Retirement Rates

Central Age of Group	Actual Rate	Current Rate	Proposed Rate
20	0.0000	0.0000	0.0000
25	0.0000	0.0000	0.0000
30	0.0000	0.0002	0.0002
35	0.0001	0.0004	0.0003
40	0.0000	0.0006	0.0005
45	0.0022	0.0023	0.0019
50	0.0066	0.0074	0.0063
55	0.0056	0.0090	0.0077
60	0.0049	0.0090	0.0077

Service Retirements

Central Age of Group	Actual Rate	Current Rate	Proposed Rate
55	0.1850	0.1170	0.1170
56	0.1311	0.1170	0.1170
57	0.1202	0.1170	0.1170
58	0.1296	0.1170	0.1170
59	0.2347	0.2100	0.2100
60	0.0972	0.0780	0.0780
61	0.0857	0.0840	0.0840
62	0.1274	0.1344	0.1344
63	0.1023	0.1050	0.1050
64	0.1089	0.1050	0.1050
65	0.1408	0.1654	0.1654
66	0.1587	0.1575	0.1575
67	0.1362	0.1365	0.1365
68	0.1272	0.1155	0.1155
69	0.1222	0.1155	0.1155

II. Local Employers (continued)

d. Chapter 366, P.L. 2001 – Prosecutors Service Retirement Rates

Age 55 with Less Than 20 Years of Service

Central Age of Group	Actual Rate	Current Rate	Proposed Rate
55	0.0000	0.0306	0.0306
56	0.0000	0.0306	0.0306
57	0.0000	0.0306	0.0306
58	0.1429	0.0306	0.0306
59	0.1111	0.0306	0.0306
60	0.1429	0.0306	0.0306
61	0.0000	0.0306	0.0306
62	0.0000	0.0306	0.0306
63	0.0000	0.0306	0.0306
64	0.0000	0.0306	0.0306
65	0.0000	0.0306	0.0306
66	0.0000	0.0306	0.0306
67	0.0000	0.0306	0.0306
68	0.0000	0.0306	0.0306
69	0.0000	0.0306	0.0306

With 20 Years of Service

Central Age of Group	Actual Rate	Current Rate	Proposed Rate
40	0.0000	0.0200	0.0200
45	0.1111	0.0250	0.0250
50	0.0000	0.0375	0.0375
53	0.0000	0.0500	0.0500
54	0.0000	0.0500	0.0500
55	0.0000	0.0500	0.0500
56	0.0000	0.0500	0.0500
57	0.0000	0.0500	0.0500
58	0.0000	0.0500	0.0500
59	0.0000	0.0500	0.0500
60	0.0000	0.0500	0.0500
61	0.0000	0.0500	0.0500
62	0.0000	0.1500	0.1500
63	0.0000	0.1500	0.1500
64	0.0000	0.3750	0.3750
65	0.0000	0.3750	0.3750
66	0.0000	0.3750	0.3750
67	0.0000	0.3750	0.3750
68	0.0000	0.3750	0.3750
69	1.0000	0.3750	0.3750

II. Local Employers (continued)

f. Chapter 366, P.L. 2001 – Prosecutors Service Retirement Rates (continued)

With 21 to 24 Years of Service

Central Age of Group	Actual Rate	Current Rate	Proposed Rate
40	0.00000	0.00000	0.00000
45	0.00000	0.00000	0.00000
50	0.00000	0.00000	0.00000
53	0.00000	0.00000	0.00000
54	0.00000	0.00000	0.00000
55	0.00000	0.00000	0.00000
56	0.00000	0.00000	0.00000
57	0.00000	0.00000	0.00000
58	0.00000	0.00000	0.00000
59	0.00000	0.00000	0.00000
60	0.00000	0.00000	0.00000
61	0.00000	0.00000	0.00000
62	0.00000	0.00000	0.00000
63	0.00000	0.00000	0.00000
64	0.00000	0.00000	0.00000
65	0.00000	0.00000	0.00000
66	0.00000	0.00000	0.00000
67	0.00000	0.00000	0.00000
68	0.00000	0.00000	0.00000
69	0.00000	0.00000	0.00000

With More Than 24 Years of Service

Central Age of Group	Actual Rate	Current Rate	Proposed Rate
40	0.0000	0.1540	0.1925
45	0.6667	0.1540	0.1925
50	0.3404	0.1540	0.1925
53	0.2759	0.1748	0.2185
54	0.4231	0.1748	0.2185
55	0.3077	0.1748	0.2185
56	0.2941	0.1748	0.2185
57	0.3125	0.1748	0.2185
58	0.1429	0.1748	0.2185
59	0.2857	0.2278	0.2848
60	0.0769	0.2278	0.2848
61	0.1667	0.2278	0.2848
62	0.4167	0.2278	0.2848
63	0.3750	0.2278	0.2848
64	0.0000	0.3780	0.4725
65	0.0000	1.0000	1.0000
66	0.5000	1.0000	1.0000
67	0.0000	1.0000	1.0000
68	0.5000	1.0000	1.0000
69	0.0000	1.0000	1.0000

II. Local Employers (continued)

g. Salary Increase Rates

Central Age of Group	Actual Rate	Current Rate	Proposed Rate
20	0.06305	0.04625	0.04625
25	0.04992	0.04400	0.04400
30	0.04077	0.04150	0.04150
35	0.03544	0.03900	0.03900
40	0.03342	0.03650	0.03650
45	0.03141	0.03400	0.03400
50	0.02945	0.03150	0.03150
55	0.02637	0.02900	0.02900
60	0.02418	0.02620	0.02620
65	0.02367	0.02210	0.02210

III. Active and Inactive Mortality Experience

a. Ordinary and Accidental Death Rates among Active Members - State

Ordinary Death Rates Among Male Active Members

Central Age of Group	Actual Rate	Current Rate	Proposed Rate
20	0.0000	0.0003	0.0003
25	0.0008	0.0004	0.0004
30	0.0003	0.0004	0.0004
35	0.0013	0.0006	0.0005
40	0.0011	0.0009	0.0008
45	0.0018	0.0012	0.0012
50	0.0019	0.0017	0.0016
55	0.0028	0.0025	0.0023
60	0.0031	0.0036	0.0034
65	0.0027	0.0059	0.0054
69	0.0031	0.0081	0.0073

Ordinary Death Rates Among Female Active Members

Central Age of Group	Actual Rate	Current Rate	Proposed Rate
20	0.0000	0.0002	0.0002
25	0.0002	0.0002	0.0002
30	0.0006	0.0002	0.0002
35	0.0003	0.0003	0.0003
40	0.0010	0.0005	0.0005
45	0.0010	0.0007	0.0008
50	0.0015	0.0011	0.0012
55	0.0020	0.0017	0.0018
60	0.0026	0.0025	0.0028
65	0.0034	0.0039	0.0043
69	0.0031	0.0054	0.0056

Accidental Death Rates Among Active Members

Central Age of Group	Actual Rate	Current Rate	Proposed Rate
20	0.0000	0.00001	0.00001
25	0.0000	0.00001	0.00001
30	0.0000	0.00001	0.00001
35	0.0000	0.00001	0.00001
40	0.0000	0.00001	0.00001
45	0.0000	0.00001	0.00001
50	0.0000	0.00001	0.00001
55	0.0000	0.00001	0.00001
60	0.0000	0.00001	0.00001
65	0.0000	0.00001	0.00001
69	0.0000	0.00001	0.00001

III. Active and Inactive Mortality Experience (continued)

b. Ordinary and Accidental Death Rates among Active Members – Local Employers

Ordinary Death Rates Among Male Active Members

Central Age of Group	Actual Rate	Current Rate	Proposed Rate
20	0.0021	0.0003	0.0003
25	0.0003	0.0004	0.0004
30	0.0006	0.0004	0.0004
35	0.0006	0.0006	0.0006
40	0.0009	0.0010	0.0010
45	0.0013	0.0013	0.0013
50	0.0019	0.0019	0.0019
55	0.0034	0.0026	0.0026
60	0.0043	0.0040	0.0040
65	0.0057	0.0065	0.0065
69	0.0059	0.0084	0.0084

Ordinary Death Rates Among Female Active Members

Central Age of Group	Actual Rate	Current Rate	Proposed Rate
20	0.0000	0.0002	0.0002
25	0.0002	0.0002	0.0002
30	0.0002	0.0002	0.0002
35	0.0003	0.0002	0.0002
40	0.0004	0.0004	0.0004
45	0.0006	0.0006	0.0006
50	0.0008	0.0009	0.0009
55	0.0013	0.0014	0.0014
60	0.0027	0.0021	0.0021
65	0.0030	0.0033	0.0033
69	0.0038	0.0045	0.0045

Accidental Death Rates Among Active Members

Central Age of Group	Actual Rate	Current Rate	Proposed Rate
20	0.00000	0.00001	0.00001
25	0.00000	0.00001	0.00001
30	0.00000	0.00001	0.00001
35	0.00000	0.00001	0.00001
40	0.00002	0.00001	0.00001
45	0.00000	0.00001	0.00001
50	0.00000	0.00001	0.00001
55	0.00001	0.00001	0.00001
60	0.00000	0.00001	0.00001
65	0.00000	0.00001	0.00001
69	0.00000	0.00001	0.00001

III. Active and Inactive Mortality Experience (continued)

c. Service Retirement, Early Retirement, Deferred Vested with Benefits Payable, and Beneficiary Mortality Rates

Male

Central Age of Group	Actual Rate	Current Rate	Proposed Rate
45	0.00571	0.00141	0.00139
50	0.00945	0.00204	0.00200
55	0.00997	0.00332	0.00326
60	0.01175	0.00607	0.00597
65	0.01448	0.01144	0.01128
70	0.02200	0.02011	0.01982
75	0.03528	0.03431	0.03382
80	0.05917	0.05867	0.05804
85	0.10046	0.10071	0.09997
90	0.16088	0.16725	0.16646
95	0.23155	0.25047	0.24983

Female

Central Age of Group	Actual Rate	Current Rate	Proposed Rate
45	0.01336	0.00103	0.00102
50	0.01340	0.00157	0.00154
55	0.00801	0.00249	0.00247
60	0.00780	0.00454	0.00452
65	0.00933	0.00872	0.00867
70	0.01325	0.01516	0.01508
75	0.02302	0.02563	0.02545
80	0.03778	0.04197	0.04168
85	0.06795	0.07043	0.06998
90	0.11597	0.11981	0.11942
95	0.21453	0.18215	0.18175

III. Active and Inactive Mortality Experience (continued)

d. Disability Mortality Rates

Male

Central Age of Group	Actual Rate	Current Rate	Proposed Rate
45	0.02087	0.02257	0.02257
50	0.02293	0.02513	0.02513
55	0.02024	0.03156	0.03156
60	0.03825	0.03804	0.03804
65	0.04241	0.04508	0.04508
70	0.06321	0.05467	0.05467
75	0.06962	0.06973	0.06973
80	0.11414	0.09244	0.09244
85	0.13854	0.12201	0.12201
90	0.20567	0.15532	0.15532
95	0.52941	0.21683	0.21683

Female

Central Age of Group	Actual Rate	Current Rate	Proposed Rate
45	0.01085	0.00760	0.00836
50	0.02124	0.01067	0.01251
55	0.01924	0.01551	0.01760
60	0.02199	0.02078	0.02298
65	0.03032	0.02672	0.02975
70	0.04304	0.03553	0.04035
75	0.05610	0.04911	0.05600
80	0.06216	0.06806	0.07747
85	0.09743	0.09425	0.10761
90	0.15244	0.13154	0.15021
95	0.21818	0.18261	0.20438

Appendix B. Complete Set of Proposed Assumptions

Withdrawal Rates

Age	State				Local Employers			
	Less Than One Year of Service	Less Than Two Years of Service	Less Than Three Years of Service	Three or More Years of Service	Less Than One Year of Service	Less Than Two Years of Service	Less Than Three Years of Service	Three or More Years of Service
19	0.28899	0.13532	0.09522	0.04480	0.40190	0.15122	0.12193	0.06311
20	0.28899	0.13532	0.09522	0.04480	0.40190	0.15122	0.12193	0.06311
21	0.28899	0.13532	0.09522	0.04480	0.40190	0.15122	0.12193	0.06311
22	0.28899	0.13532	0.09522	0.04480	0.40190	0.15122	0.12193	0.06311
23	0.36124	0.13532	0.09522	0.04691	0.40190	0.15122	0.12193	0.06311
24	0.36124	0.13532	0.09522	0.04691	0.40190	0.15122	0.12193	0.06311
25	0.36124	0.13532	0.09522	0.04691	0.40190	0.15122	0.12193	0.06311
26	0.36124	0.13532	0.09522	0.04339	0.40190	0.15122	0.12193	0.06311
27	0.36124	0.13532	0.09522	0.03988	0.40190	0.15122	0.12193	0.06311
28	0.36124	0.13532	0.09522	0.04737	0.41099	0.15705	0.14609	0.06591
29	0.36124	0.13532	0.09522	0.04279	0.39969	0.15187	0.13963	0.06348
30	0.36124	0.13532	0.09522	0.03821	0.38840	0.14667	0.13318	0.06106
31	0.36124	0.13532	0.09522	0.03596	0.37854	0.14214	0.12754	0.05780
32	0.36124	0.13532	0.09522	0.03371	0.36865	0.13759	0.12174	0.05455
33	0.28595	0.12026	0.09132	0.03333	0.35466	0.12605	0.11928	0.04562
34	0.27366	0.11671	0.08560	0.03095	0.34490	0.12174	0.11349	0.04274
35	0.26139	0.10831	0.07988	0.02857	0.33513	0.11744	0.10768	0.03985
36	0.25783	0.10658	0.07822	0.02857	0.33220	0.11616	0.10595	0.03904
37	0.25426	0.10486	0.07657	0.02857	0.32930	0.11486	0.10422	0.03824
38	0.22288	0.09167	0.06659	0.01799	0.32635	0.10760	0.11038	0.03039
39	0.21971	0.09014	0.06513	0.01799	0.32345	0.10638	0.10850	0.02974
40	0.21655	0.08861	0.06366	0.01799	0.32053	0.10516	0.10662	0.02909
41	0.21410	0.08741	0.06251	0.01679	0.31845	0.10429	0.10529	0.02842
42	0.21166	0.08622	0.06137	0.01561	0.31635	0.10342	0.10398	0.02777
43	0.20413	0.08502	0.06023	0.01467	0.31428	0.10256	0.10631	0.02583
44	0.20413	0.08383	0.05909	0.01345	0.31221	0.10169	0.10494	0.02521
45	0.20413	0.08264	0.05794	0.01223	0.31013	0.10082	0.10356	0.02459
46	0.20413	0.08136	0.05672	0.01223	0.30775	0.09983	0.10198	0.02336
47	0.20413	0.08008	0.05550	0.01223	0.30538	0.09883	0.10041	0.02213
48	0.20413	0.07654	0.05210	0.00896	0.28843	0.09783	0.09883	0.02195
49	0.20413	0.07654	0.05210	0.00896	0.28614	0.09684	0.09725	0.02065
50	0.20413	0.07654	0.05210	0.00896	0.28389	0.09584	0.09567	0.01937
51	0.20413	0.07654	0.05210	0.00896	0.28248	0.09523	0.09470	0.01902
52	0.20413	0.07654	0.05210	0.00896	0.28109	0.09463	0.09373	0.01866
53	0.20413	0.07654	0.05210	0.00882	0.27956	0.09395	0.09277	0.01664
54	0.20413	0.07654	0.05210	0.00882	0.27956	0.09395	0.09181	0.01600
55	0.20413	0.07654	0.05210	0.00882	0.27956	0.09395	0.09081	0.01600
56	0.20413	0.07654	0.05210	0.00882	0.27956	0.09395	0.09293	0.01600
57	0.20413	0.07654	0.05210	0.00882	0.27956	0.09395	0.09503	0.01600
58	0.20413	0.07654	0.05210	0.00882	0.22365	0.09395	0.06699	0.01524
59	0.20413	0.07654	0.05210	0.00882	0.22365	0.09395	0.06844	0.01524
60	0.20413	0.07654	0.05210	0.00882	0.22365	0.09395	0.06844	0.01524
61	0.20413	0.07654	0.05210	0.00882	0.22365	0.09395	0.06844	0.01524
62	0.20413	0.07654	0.05210	0.00882	0.22365	0.09395	0.06844	0.01524
63	0.16330	0.07654	0.05210	0.00882	0.22365	0.09395	0.06844	0.01524
64	0.16330	0.07654	0.05210	0.00882	0.22365	0.09395	0.06844	0.01524

Ordinary and Accidental Disability Rates

Age	State		Local Employers	
	Due to Ordinary Causes	Due to Accidental Causes	Due to Ordinary Causes	Due to Accidental Causes
19	0.00005	0.00001	0.00000	0.00001
20	0.00005	0.00001	0.00000	0.00001
21	0.00005	0.00001	0.00000	0.00001
22	0.00005	0.00001	0.00000	0.00001
23	0.00006	0.00001	0.00000	0.00002
24	0.00006	0.00001	0.00000	0.00002
25	0.00006	0.00001	0.00000	0.00002
26	0.00009	0.00001	0.00000	0.00003
27	0.00013	0.00002	0.00000	0.00004
28	0.00067	0.00002	0.00037	0.00004
29	0.00081	0.00004	0.00048	0.00004
30	0.00097	0.00004	0.00060	0.00004
31	0.00102	0.00005	0.00086	0.00004
32	0.00106	0.00006	0.00111	0.00004
33	0.00162	0.00008	0.00138	0.00005
34	0.00189	0.00010	0.00163	0.00005
35	0.00216	0.00011	0.00189	0.00005
36	0.00234	0.00012	0.00218	0.00005
37	0.00251	0.00013	0.00246	0.00008
38	0.00269	0.00018	0.00223	0.00012
39	0.00286	0.00019	0.00246	0.00012
40	0.00304	0.00020	0.00269	0.00012
41	0.00336	0.00022	0.00269	0.00012
42	0.00367	0.00022	0.00270	0.00012
43	0.00354	0.00022	0.00361	0.00014
44	0.00382	0.00022	0.00362	0.00017
45	0.00410	0.00023	0.00363	0.00017
46	0.00421	0.00024	0.00384	0.00018
47	0.00431	0.00025	0.00405	0.00020
48	0.00441	0.00031	0.00394	0.00021
49	0.00451	0.00034	0.00414	0.00021
50	0.00462	0.00035	0.00434	0.00021
51	0.00500	0.00037	0.00470	0.00022
52	0.00539	0.00041	0.00507	0.00023
53	0.00540	0.00041	0.00507	0.00023
54	0.00550	0.00044	0.00547	0.00024
55	0.00559	0.00047	0.00587	0.00026
56	0.00570	0.00049	0.00574	0.00028
57	0.00579	0.00053	0.00558	0.00029
58	0.00829	0.00037	0.00677	0.00028
59	0.00908	0.00039	0.00750	0.00029
60	0.00987	0.00041	0.00759	0.00030
61	0.00995	0.00043	0.00793	0.00030
62	0.01002	0.00045	0.00829	0.00034
63	0.01152	0.00056	0.00863	0.00027
64	0.01170	0.00059	0.00898	0.00027
65	0.01190	0.00061	0.00932	0.00027
66	0.01214	0.00062	0.00977	0.00027
67	0.01286	0.00062	0.01022	0.00027
68	0.01352	0.00062	0.01066	0.00027
69	0.01417	0.00062	0.01110	0.00027

Deferred Vested, Early, and Service Retirement Rates

Age	State		Local Employers	
	Deferred Vested and Reduced Early Retirement	Service and Unreduced Early Retirement	Deferred Vested and Reduced Early Retirement	Service and Unreduced Early Retirement
30	0.00000	0.00000	0.00026	0.00000
31	0.00000	0.00000	0.00026	0.00000
32	0.00000	0.00000	0.00026	0.00000
33	0.00040	0.00000	0.00032	0.00000
34	0.00044	0.00000	0.00033	0.00000
35	0.00048	0.00000	0.00033	0.00000
36	0.00048	0.00000	0.00035	0.00000
37	0.00048	0.00000	0.00037	0.00000
38	0.00053	0.00000	0.00043	0.00000
39	0.00053	0.00000	0.00045	0.00000
40	0.00053	0.00000	0.00047	0.00000
41	0.00057	0.00000	0.00049	0.00000
42	0.00060	0.00000	0.00052	0.00000
43	0.00214	0.00000	0.00145	0.00000
44	0.00225	0.00000	0.00152	0.00000
45	0.00237	0.00000	0.00159	0.00000
46	0.00380	0.00000	0.00226	0.00000
47	0.00524	0.00000	0.00293	0.00000
48	0.01100	0.00000	0.00463	0.00000
49	0.01100	0.00000	0.00550	0.00000
50	0.01100	0.00000	0.00636	0.00000
51	0.01100	0.00000	0.00713	0.00000
52	0.01100	0.00000	0.00765	0.00000
53	0.01425	0.00000	0.00765	0.00000
54	0.01425	0.00000	0.00765	0.00000
55	0.01425	0.17500	0.00765	0.11700
56	0.01425	0.14000	0.00765	0.11700
57	0.01425	0.13000	0.00765	0.11700
58	0.00900	0.13000	0.00765	0.11700
59	0.00900	0.19000	0.00765	0.21000
60	0.00900	0.09000	0.00765	0.07800
61	0.00900	0.09000	0.00765	0.08400
62	0.00900	0.14580	0.00765	0.13440
63	0.01500	0.11340	0.00900	0.10500
64	0.01500	0.12150	0.00900	0.10500
65	0.00000	0.16200	0.00000	0.16538
66	0.00000	0.17000	0.00000	0.15750
67	0.00000	0.15000	0.00000	0.13650
68	0.00000	0.15000	0.00000	0.11550
69	0.00000	0.15000	0.00000	0.11550

Chapter 366, P.L. 2001 – Prosecutors Service Retirement Rates

Age	State				Local Employers			
	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	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
38	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
39	0.00000	0.02500	0.00000	0.23100	0.00000	0.02500	0.00000	0.19250
40	0.00000	0.02500	0.00000	0.23100	0.00000	0.02500	0.00000	0.19250
41	0.00000	0.02500	0.00000	0.23100	0.00000	0.02500	0.00000	0.19250
42	0.00000	0.02500	0.00000	0.23100	0.00000	0.02500	0.00000	0.19250
43	0.00000	0.02500	0.00000	0.23100	0.00000	0.02500	0.00000	0.19250
44	0.00000	0.02500	0.00000	0.23100	0.00000	0.02500	0.00000	0.19250
45	0.00000	0.02500	0.00000	0.23100	0.00000	0.02500	0.00000	0.19250
46	0.00000	0.02500	0.00000	0.23100	0.00000	0.02500	0.00000	0.19250
47	0.00000	0.02500	0.00000	0.23100	0.00000	0.02500	0.00000	0.19250
48	0.00000	0.03750	0.00000	0.23100	0.00000	0.03750	0.00000	0.19250
49	0.00000	0.03750	0.00000	0.23100	0.00000	0.03750	0.00000	0.19250
50	0.00000	0.03750	0.00000	0.23100	0.00000	0.03750	0.00000	0.19250
51	0.00000	0.03750	0.00000	0.23100	0.00000	0.03750	0.00000	0.19250
52	0.00000	0.03750	0.00000	0.23100	0.00000	0.03750	0.00000	0.19250
53	0.00000	0.05000	0.00000	0.26220	0.00000	0.05000	0.00000	0.21850
54	0.00000	0.05000	0.00000	0.26220	0.00000	0.05000	0.00000	0.21850
55	0.02585	0.05000	0.00000	0.26220	0.03060	0.05000	0.00000	0.21850
56	0.02585	0.05000	0.00000	0.26220	0.03060	0.05000	0.00000	0.21850
57	0.02585	0.05000	0.00000	0.26220	0.03060	0.05000	0.00000	0.21850
58	0.02630	0.05000	0.00000	0.26220	0.03060	0.05000	0.00000	0.21850
59	0.02630	0.05000	0.00000	0.34170	0.03060	0.05000	0.00000	0.28475
60	0.02630	0.05000	0.00000	0.34170	0.03060	0.05000	0.00000	0.28475
61	0.02630	0.05000	0.00000	0.34170	0.03060	0.05000	0.00000	0.28475
62	0.02630	0.15000	0.00000	0.34170	0.03060	0.15000	0.00000	0.28475
63	0.02630	0.15000	0.00000	0.34170	0.03060	0.15000	0.00000	0.22780
64	0.02630	0.37500	0.00000	0.56700	0.03060	0.37500	0.00000	0.37800
65	0.02630	0.37500	0.00000	1.00000	0.03060	0.37500	0.00000	1.00000
66	0.02630	0.37500	0.00000	1.00000	0.03060	0.37500	0.00000	1.00000
67	0.02630	0.37500	0.00000	1.00000	0.03060	0.37500	0.00000	1.00000
68	0.02630	0.37500	0.00000	1.00000	0.03060	0.37500	0.00000	1.00000
69	0.02630	0.37500	0.00000	1.00000	0.03060	0.37500	0.00000	1.00000
70	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000

Active Salary Increase Rates

Age	State		Local Employers	
	Fiscal Year Ending 2015 through Fiscal Year Ending 2021	Fiscal Year Ending 2022 and Thereafter	Fiscal Year Ending 2015 through Fiscal Year Ending 2021	Fiscal Year Ending 2022 and Thereafter
19	0.04700	0.05700	0.04700	0.05700
20	0.04650	0.05650	0.04650	0.05650
21	0.04600	0.05600	0.04600	0.05600
22	0.04550	0.05550	0.04550	0.05550
23	0.04500	0.05500	0.04500	0.05500
24	0.04450	0.05450	0.04450	0.05450
25	0.04400	0.05400	0.04400	0.05400
26	0.04350	0.05350	0.04350	0.05350
27	0.04300	0.05300	0.04300	0.05300
28	0.04250	0.05250	0.04250	0.05250
29	0.04200	0.05200	0.04200	0.05200
30	0.04150	0.05150	0.04150	0.05150
31	0.04100	0.05100	0.04100	0.05100
32	0.04050	0.05050	0.04050	0.05050
33	0.04000	0.05000	0.04000	0.05000
34	0.03950	0.04950	0.03950	0.04950
35	0.03900	0.04900	0.03900	0.04900
36	0.03850	0.04850	0.03850	0.04850
37	0.03800	0.04800	0.03800	0.04800
38	0.03750	0.04750	0.03750	0.04750
39	0.03700	0.04700	0.03700	0.04700
40	0.03650	0.04650	0.03650	0.04650
41	0.03600	0.04600	0.03600	0.04600
42	0.03550	0.04550	0.03550	0.04550
43	0.03500	0.04500	0.03500	0.04500
44	0.03450	0.04450	0.03450	0.04450
45	0.03400	0.04400	0.03400	0.04400
46	0.03350	0.04350	0.03350	0.04350
47	0.03300	0.04300	0.03300	0.04300
48	0.03250	0.04250	0.03250	0.04250
49	0.03200	0.04200	0.03200	0.04200
50	0.03150	0.04150	0.03150	0.04150
51	0.03100	0.04100	0.03100	0.04100
52	0.03050	0.04050	0.03050	0.04050
53	0.03000	0.04000	0.03000	0.04000
54	0.02950	0.03950	0.02950	0.03950
55	0.02900	0.03900	0.02900	0.03900
56	0.02850	0.03850	0.02850	0.03850
57	0.02800	0.03800	0.02800	0.03800
58	0.02750	0.03750	0.02750	0.03750
59	0.02700	0.03700	0.02700	0.03700
60	0.02650	0.03650	0.02650	0.03650
61	0.02550	0.03550	0.02550	0.03550
62	0.02450	0.03450	0.02450	0.03450
63	0.02350	0.03350	0.02350	0.03350
64	0.02250	0.03250	0.02250	0.03250
65	0.02150	0.03150	0.02150	0.03150
66	0.02150	0.03150	0.02150	0.03150
67	0.02150	0.03150	0.02150	0.03150
68	0.02150	0.03150	0.02150	0.03150
69	0.02150	0.03150	0.02150	0.03150
70	0.02150	0.03150	0.02150	0.03150

Active Mortality

Age	State			Local Employers		
	Ordinary Death		Accidental Death	Ordinary Death		Accidental Death
	Male	Female		Male	Female	
20	0.00028	0.00018	0.00001	0.00032	0.00016	0.00001
21	0.00030	0.00018	0.00001	0.00033	0.00016	0.00001
22	0.00032	0.00019	0.00001	0.00035	0.00017	0.00001
23	0.00033	0.00019	0.00001	0.00036	0.00018	0.00001
24	0.00035	0.00019	0.00001	0.00037	0.00018	0.00001
25	0.00036	0.00019	0.00001	0.00037	0.00019	0.00001
26	0.00037	0.00019	0.00001	0.00038	0.00019	0.00001
27	0.00037	0.00020	0.00001	0.00038	0.00019	0.00001
28	0.00038	0.00020	0.00001	0.00038	0.00019	0.00001
29	0.00038	0.00021	0.00001	0.00038	0.00019	0.00001
30	0.00038	0.00021	0.00001	0.00039	0.00020	0.00001
31	0.00038	0.00022	0.00001	0.00041	0.00020	0.00001
32	0.00039	0.00024	0.00001	0.00044	0.00021	0.00001
33	0.00041	0.00025	0.00001	0.00050	0.00021	0.00001
34	0.00044	0.00026	0.00001	0.00056	0.00022	0.00001
35	0.00050	0.00031	0.00001	0.00063	0.00024	0.00001
36	0.00056	0.00035	0.00001	0.00070	0.00025	0.00001
37	0.00063	0.00039	0.00001	0.00077	0.00026	0.00001
38	0.00070	0.00044	0.00001	0.00084	0.00031	0.00001
39	0.00077	0.00048	0.00001	0.00090	0.00035	0.00001
40	0.00084	0.00051	0.00001	0.00096	0.00039	0.00001
41	0.00090	0.00055	0.00001	0.00102	0.00044	0.00001
42	0.00096	0.00060	0.00001	0.00108	0.00048	0.00001
43	0.00102	0.00065	0.00001	0.00114	0.00051	0.00001
44	0.00108	0.00071	0.00001	0.00122	0.00055	0.00001
45	0.00114	0.00077	0.00001	0.00130	0.00060	0.00001
46	0.00122	0.00085	0.00001	0.00140	0.00065	0.00001
47	0.00130	0.00094	0.00001	0.00151	0.00071	0.00001
48	0.00140	0.00103	0.00001	0.00162	0.00077	0.00001
49	0.00151	0.00112	0.00001	0.00173	0.00085	0.00001
50	0.00162	0.00122	0.00001	0.00186	0.00094	0.00001
51	0.00173	0.00133	0.00001	0.00200	0.00103	0.00001
52	0.00186	0.00143	0.00001	0.00214	0.00112	0.00001
53	0.00200	0.00155	0.00001	0.00229	0.00122	0.00001
54	0.00214	0.00168	0.00001	0.00245	0.00133	0.00001
55	0.00229	0.00181	0.00001	0.00262	0.00143	0.00001
56	0.00245	0.00197	0.00001	0.00281	0.00155	0.00001
57	0.00262	0.00214	0.00001	0.00303	0.00168	0.00001
58	0.00281	0.00232	0.00001	0.00331	0.00181	0.00001
59	0.00303	0.00253	0.00001	0.00363	0.00197	0.00001
60	0.00331	0.00276	0.00001	0.00400	0.00214	0.00001
61	0.00363	0.00301	0.00001	0.00441	0.00232	0.00001
62	0.00400	0.00329	0.00001	0.00488	0.00253	0.00001
63	0.00441	0.00360	0.00001	0.00538	0.00276	0.00001
64	0.00488	0.00393	0.00001	0.00592	0.00301	0.00001
65	0.00538	0.00429	0.00001	0.00647	0.00329	0.00001
66	0.00592	0.00466	0.00001	0.00703	0.00360	0.00001
67	0.00647	0.00504	0.00001	0.00757	0.00393	0.00001
68	0.00703	0.00543	0.00001	0.00810	0.00429	0.00001
69	0.00757	0.00582	0.00001	0.00860	0.00466	0.00001

Inactive Mortality

Age	Service Retirement,		Disability		Age	Service Retirement,		Disability	
	Male	Female	Male	Female		Male	Female	Male	Female
19	0.00031	0.00019	0.00000	0.00000	70	0.01953	0.01479	0.05445	0.04014
20	0.00033	0.00019	0.00000	0.00745	71	0.02187	0.01666	0.05691	0.04285
21	0.00034	0.00019	0.00000	0.00745	72	0.02420	0.01847	0.05961	0.04577
22	0.00035	0.00019	0.00000	0.00745	73	0.02687	0.02054	0.06258	0.04890
23	0.00036	0.00019	0.00000	0.00745	74	0.02993	0.02281	0.06584	0.05223
24	0.00037	0.00019	0.02257	0.00745	75	0.03339	0.02528	0.06941	0.05578
25	0.00037	0.00020	0.02257	0.00745	76	0.03730	0.02788	0.07329	0.05954
26	0.00037	0.00020	0.02257	0.00745	77	0.04158	0.03072	0.07751	0.06354
27	0.00038	0.00021	0.02257	0.00745	78	0.04630	0.03387	0.08207	0.06779
28	0.00038	0.00022	0.02257	0.00745	79	0.05150	0.03733	0.08695	0.07231
29	0.00039	0.00023	0.02257	0.00745	80	0.05729	0.04122	0.09215	0.07713
30	0.00041	0.00025	0.02257	0.00745	81	0.06372	0.04556	0.09764	0.08230
31	0.00044	0.00026	0.02257	0.00745	82	0.07139	0.05043	0.10339	0.08784
32	0.00050	0.00031	0.02257	0.00745	83	0.07984	0.05590	0.10937	0.09379
33	0.00056	0.00035	0.02257	0.00745	84	0.08900	0.06207	0.11554	0.10020
34	0.00063	0.00039	0.02257	0.00745	85	0.09908	0.06903	0.12188	0.10710
35	0.00070	0.00043	0.02257	0.00745	86	0.10998	0.07698	0.12834	0.11451
36	0.00077	0.00047	0.02257	0.00745	87	0.12194	0.08594	0.13492	0.12246
37	0.00084	0.00051	0.02257	0.00745	88	0.13523	0.09595	0.14160	0.13097
38	0.00090	0.00055	0.02257	0.00745	89	0.14984	0.10687	0.14837	0.14005
39	0.00096	0.00059	0.02257	0.00745	90	0.16559	0.11880	0.15523	0.14970
40	0.00101	0.00064	0.02257	0.00745	91	0.18267	0.13129	0.16219	0.15992
41	0.00107	0.00070	0.02257	0.00745	92	0.19897	0.14417	0.16923	0.17043
42	0.00113	0.00076	0.02257	0.00745	93	0.21596	0.15715	0.18341	0.18280
43	0.00120	0.00084	0.02257	0.00745	94	0.23296	0.17009	0.19977	0.19451
44	0.00129	0.00092	0.02257	0.00745	95	0.24994	0.18243	0.21661	0.20538
45	0.00138	0.00101	0.02257	0.00818	96	0.26696	0.19412	0.23366	0.21524
46	0.00149	0.00111	0.02257	0.00896	97	0.28334	0.20497	0.25069	0.22395
47	0.00159	0.00120	0.02257	0.00977	98	0.29925	0.21503	0.26749	0.23139
48	0.00171	0.00130	0.02257	0.01063	99	0.31498	0.22372	0.28391	0.23747
49	0.00183	0.00141	0.02385	0.01153	100	0.32988	0.23116	0.29985	0.24483
50	0.00196	0.00152	0.02512	0.01248	101	0.34421	0.23723	0.31530	0.25450
51	0.00210	0.00165	0.02640	0.01346	102	0.35863	0.24483	0.33021	0.26604
52	0.00240	0.00182	0.02769	0.01446	103	0.37169	0.25450	0.34456	0.27905
53	0.00261	0.00199	0.02898	0.01550	104	0.38304	0.26604	0.35863	0.29312
54	0.00286	0.00218	0.03027	0.01654	105	0.39200	0.27906	0.37169	0.30781
55	0.00313	0.00240	0.03156	0.01760	106	0.39789	0.29312	0.38304	0.32272
56	0.00356	0.00270	0.03286	0.01865	107	0.40000	0.30781	0.39200	0.33744
57	0.00412	0.00307	0.03415	0.01971	108	0.40000	0.32273	0.39789	0.35154
58	0.00461	0.00346	0.03544	0.02077	109	0.40000	0.33744	0.40000	0.36462
59	0.00519	0.00390	0.03673	0.02184	110	0.40000	0.35154	0.40000	0.37625
60	0.00585	0.00442	0.03803	0.02294	111	0.40000	0.36462	0.40000	0.38601
61	0.00664	0.00503	0.03933	0.02408	112	0.40000	0.37625	0.40000	0.39351
62	0.00756	0.00579	0.04067	0.02529	113	0.40000	0.38602	0.40000	0.39831
63	0.00863	0.00662	0.04204	0.02660	114	0.40000	0.39351	0.40000	1.00000
64	0.00987	0.00761	0.04347	0.02803	115	0.40000	0.39831	0.40000	1.00000
65	0.01112	0.00858	0.04498	0.02959	116	0.40000	0.40000	1.00000	1.00000
66	0.01256	0.00966	0.04658	0.03132	117	1.00000	1.00000	1.00000	1.00000
67	0.01422	0.01090	0.04831	0.03323	118	1.00000	1.00000	1.00000	1.00000
68	0.01587	0.01210	0.05017	0.03534	119	1.00000	1.00000	1.00000	1.00000
69	0.01762	0.01338	0.05221	0.03763	120	1.00000	1.00000	1.00000	1.00000