

OCTOBER, 2003

Analysis of Early Retirement Incentive Program (ERIP)

for the Worcester Regional Retirement System



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INTRODUCTION

The Public Employee Retirement Administration Commission (PERAC) is pleased to release our analysis of Chapter 116 of the Acts of 2002, *An Act Providing for Local Government Workforce Reduction Through an Early Retirement Incentive Program (ERIP) for Certain Employees* for the Worcester Regional Retirement System. Section 1 of the law directed PERAC to complete an analysis of the costs and liabilities attributable to the additional benefits payable in accordance with the Act and submit a report to the board by December 31, 2003.

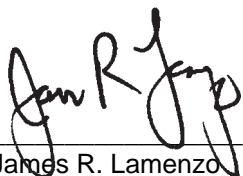
The law provides that retirement allowances of members who participated in the ERIP be determined by adding up to 5 years to the member's age and/or creditable service (any combination in full years up to a maximum of 5 years). A member's enhanced benefit cannot exceed 80% of the average rate of annual compensation used in his/her calculation. Members retiring under the program had effective dates of retirement between June 30, 2002 and January 31, 2003.

This study was based on active member data as of December 31, 2001, and additional data for retirees who were eligible for and elected the ERIP. All data was supplied by the board. We previously reviewed the December 31, 2001 data as part of the 2002 data submission process. We reviewed each member's data as both an active and retired member for reasonableness and consistency.

We used the investment return assumption used in the most recent actuarial valuation report. For all other assumptions, we used the standard PERAC assumption set for performing actuarial valuations as of January 1, 2002. These assumptions differ from the assumptions used in your last actuarial valuation performed as of January 1, 2001. The assumptions are shown at the back of this report.

We believe this report represents an accurate appraisal of the costs and liabilities of the ERIP for the retirement system. This analysis was performed in accordance with generally accepted actuarial principles and practices relating to pension plans. In our opinion, the actuarial assumptions used in this report are reasonable, related to plan experience and expectations, and represent our best estimate of anticipated experience.

Respectfully submitted,
Public Employee Retirement Administration Commission



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Joseph E. Connarton
Executive Director

Dated: October 17, 2003

COST ANALYSIS BY GOVERNMENTAL UNIT

Methodology

The results of our analysis for each governmental unit that accepted the ERIP are presented on the following pages. Participating units had the option to limit the number of years and/or the number of members eligible to retire under the program. Such limitations are noted.

Our analysis of the cost of the ERIP consisted of measuring the change in both the actuarial accrued liability and normal cost before and after the application of the enhanced benefit. The amortization the increase in actuarial accrued liability and the normal cost form the basis of the impact of the ERIP on the plan's funding schedule. These items are discussed below.

Actuarial Accrued Liability

We measured the increase in actuarial accrued liability due to the incentive for each member who retired under the program. First, we valued the group as active members on January 1, 2002 (including any changes to reflect service adjustments made after January 1, 2002, such as service buy-backs). This calculation determines the liability attributable to the employees who elected the ERIP exclusive of the additional liability associated with the incentive program. These results were then brought forward on an actuarial basis to reflect the estimated accrued liability as of the average retirement date for each unit.

We then valued the same group as retirees after the application of the ERIP. These liabilities were determined as of the average retirement date for each unit.

The accrued liability for the members as retirees including the ERIP less the accrued liability for the members as active employees excluding the ERIP represents the increase in accrued liability due to the ERIP. This increase will be amortized as part of the system's funding schedule and will be a component of the system's annual appropriation. We assumed the amortization of the increase in liability would begin with the FY05 appropriation.

Normal Cost

The increase in actuarial liability is somewhat offset by a decrease in normal cost. The normal cost, or actuarial cost for the current year for active members, is shown as of January 1, 2002. There is no normal cost for retired members. Any decrease in normal cost for a retiring member would only be expected to last for a few years (the period the member would have remained in active service if the ERIP were not implemented).

COST ANALYSIS BY GOVERNMENTAL UNIT *(continued)*

Town of Ashburnham – Limited to 3 Employees

Actives		Retirees	
Number of Members	2	Number of Members	2
Average Service	31.7	Average Age	53.4
Average Compensation	\$52,615	Average Annual Benefit	\$37,347

	As Actives	As Retirees
Total Regular Compensation	\$105,200	N/A
Total Normal Cost	\$12,900	N/A
Employee Contributions	\$5,900	N/A
Net Employer Normal Cost	\$7,000	N/A
Actuarial Liability (as of December 31, 2002)	\$599,100	\$841,500

Increase in Actuarial Liability (as of December 31, 2002)	\$242,400
Amortization of Increase for FY05 (assumed average payment October 1)	
4.5% annual increasing basis to 2026	\$18,300

The above results provide a measure of the increase in actuarial accrued liability and decrease in normal cost due to the ERIP. The actuarial liability and normal cost were determined as active members (before the implementation of the ERIP) and as retired members (with the enhanced ERIP benefit).

For active members, average service reflects service as of January 1, 2002 but excludes any enhanced service provided by the ERIP. For retired members, the averages are as of December 31, 2002.

COST ANALYSIS BY GOVERNMENTAL UNIT *(continued)*

Town of Auburn – Limited to 21 Employees

Actives	
Number of Members	21
Average Service	22.9
Average Compensation	\$35,764

Retirees	
Number of Members	21
Average Age	58.9
Average Annual Benefit	\$21,430

	As Actives	As Retirees
Total Regular Compensation	\$751,000	N/A
Total Normal Cost	\$88,700	N/A
Employee Contributions	\$45,900	N/A
Net Employer Normal Cost	\$42,800	N/A
Actuarial Liability (as of December 31, 2002)	\$3,815,500	\$5,148,200

Increase in Actuarial Liability (as of December 31, 2002)	\$1,332,700
Amortization of Increase for FY05 (assumed average payment October 1)	
4.5% annual increasing basis to 2026	\$100,800

The above results provide a measure of the increase in actuarial accrued liability and decrease in normal cost due to the ERIP. The actuarial liability and normal cost were determined as active members (before the implementation of the ERIP) and as retired members (with the enhanced ERIP benefit).

For active members, average service reflects service as of January 1, 2002 but excludes any enhanced service provided by the ERIP. For retired members, the averages are as of December 31, 2002.

COST ANALYSIS BY GOVERNMENTAL UNIT *(continued)*

Town of Barre – Limited to 6 Employees

Actives	
Number of Members	1
Average Service	22.7
Average Compensation	\$50,590

Retirees	
Number of Members	1
Average Age	70.9
Average Annual Benefit	\$33,853

	As Actives	As Retirees
Total Regular Compensation	\$50,590	N/A
Total Normal Cost	\$0	N/A
Employee Contributions	\$0	N/A
Net Employer Normal Cost	\$0	N/A
Actuarial Liability (as of December 31, 2002)	\$244,100	\$287,200

Increase in Actuarial Liability (as of December 31, 2002)	\$43,100
Amortization of Increase for FY05 (assumed average payment October 1)	
4.5% annual increasing basis to 2026	\$3,300

The above results provide a measure of the increase in actuarial accrued liability and decrease in normal cost due to the ERIP. The actuarial liability and normal cost were determined as active members (before the implementation of the ERIP) and as retired members (with the enhanced ERIP benefit).

For active members, average service reflects service as of January 1, 2002 but excludes any enhanced service provided by the ERIP. For retired members, the averages are as of December 31, 2002.

COST ANALYSIS BY GOVERNMENTAL UNIT *(continued)*

Town of Bolton

Actives		Retirees	
Number of Members	3	Number of Members	3
Average Service	19.4	Average Age	66.8
Average Compensation	\$19,005	Average Annual Benefit	\$12,563

	As Actives	As Retirees
Total Regular Compensation	\$57,000	N/A
Total Normal Cost	\$8,900	N/A
Employee Contributions	\$3,500	N/A
Net Employer Normal Cost	\$5,400	N/A
Actuarial Liability (as of December 31, 2002)	\$295,700	\$426,000

Increase in Actuarial Liability (as of December 31, 2002)	\$130,300
Amortization of Increase for FY05 (assumed average payment October 1)	
4.5% annual increasing basis to 2026	\$9,900

The above results provide a measure of the increase in actuarial accrued liability and decrease in normal cost due to the ERIP. The actuarial liability and normal cost were determined as active members (before the implementation of the ERIP) and as retired members (with the enhanced ERIP benefit).

For active members, average service reflects service as of January 1, 2002 but excludes any enhanced service provided by the ERIP. For retired members, the averages are as of December 31, 2002.

COST ANALYSIS BY GOVERNMENTAL UNIT *(continued)*

Town of Boylston – Limited to 2 Employees

Actives		Retirees	
Number of Members	2	Number of Members	2
Average Service	21.1	Average Age	60.9
Average Compensation	\$35,112	Average Annual Benefit	\$19,920

	As Actives	As Retirees
Total Regular Compensation	\$70,200	N/A
Total Normal Cost	\$7,800	N/A
Employee Contributions	\$4,700	N/A
Net Employer Normal Cost	\$3,100	N/A
Actuarial Liability (as of December 31, 2002)	\$335,600	\$434,800

Increase in Actuarial Liability (as of December 31, 2002)	\$99,200
Amortization of Increase for FY05 (assumed average payment October 1)	
4.5% annual increasing basis to 2026	\$7,500

The above results provide a measure of the increase in actuarial accrued liability and decrease in normal cost due to the ERIP. The actuarial liability and normal cost were determined as active members (before the implementation of the ERIP) and as retired members (with the enhanced ERIP benefit).

For active members, average service reflects service as of January 1, 2002 but excludes any enhanced service provided by the ERIP. For retired members, the averages are as of December 31, 2002.

COST ANALYSIS BY GOVERNMENTAL UNIT *(continued)*

Town of Brookfield

Actives		Retirees	
Number of Members	2	Number of Members	2
Average Service	27.7	Average Age	72.7
Average Compensation	\$26,909	Average Annual Benefit	\$18,142

	As Actives	As Retirees
Total Regular Compensation	\$53,800	N/A
Total Normal Cost	\$1,300	N/A
Employee Contributions	\$600	N/A
Net Employer Normal Cost	\$700	N/A
Actuarial Liability (as of December 31, 2002)	\$237,300	\$302,800

Increase in Actuarial Liability (as of December 31, 2002)	\$65,500
Amortization of Increase for FY05 (assumed average payment October 1)	
4.5% annual increasing basis to 2026	\$5,000

The above results provide a measure of the increase in actuarial accrued liability and decrease in normal cost due to the ERIP. The actuarial liability and normal cost were determined as active members (before the implementation of the ERIP) and as retired members (with the enhanced ERIP benefit).

For active members, average service reflects service as of January 1, 2002 but excludes any enhanced service provided by the ERIP. For retired members, the averages are as of December 31, 2002.

COST ANALYSIS BY GOVERNMENTAL UNIT *(continued)*

Town of Charlton – Limited to 7 Group 1 Employees

Actives		Retirees	
Number of Members	7	Number of Members	7
Average Service	20.0	Average Age	62.0
Average Compensation	\$36,880	Average Annual Benefit	\$18,877

	As Actives	As Retirees
Total Regular Compensation	\$258,200	N/A
Total Normal Cost	\$26,000	N/A
Employee Contributions	\$14,700	N/A
Net Employer Normal Cost	\$11,300	N/A
Actuarial Liability (as of December 31, 2002)	\$1,135,300	\$1,473,100

Increase in Actuarial Liability (as of December 31, 2002)	\$337,800
Amortization of Increase for FY05 (assumed average payment October 1)	
4.5% annual increasing basis to 2026	\$25,600

The above results provide a measure of the increase in actuarial accrued liability and decrease in normal cost due to the ERIP. The actuarial liability and normal cost were determined as active members (before the implementation of the ERIP) and as retired members (with the enhanced ERIP benefit).

For active members, average service reflects service as of January 1, 2002 but excludes any enhanced service provided by the ERIP. For retired members, the averages are as of December 31, 2002.

COST ANALYSIS BY GOVERNMENTAL UNIT *(continued)*

Town of Douglas

Actives	
Number of Members	2
Average Service	16.9
Average Compensation	\$36,396

Retirees	
Number of Members	2
Average Age	64.0
Average Annual Benefit	\$17,759

	As Actives	As Retirees
Total Regular Compensation	\$72,800	N/A
Total Normal Cost	\$9,700	N/A
Employee Contributions	\$4,300	N/A
Net Employer Normal Cost	\$5,400	N/A
Actuarial Liability (as of December 31, 2002)	\$272,800	\$367,800

Increase in Actuarial Liability (as of December 31, 2002)	\$95,000
Amortization of Increase for FY05 (assumed average payment October 1)	
4.5% annual increasing basis to 2026	\$7,200

The above results provide a measure of the increase in actuarial accrued liability and decrease in normal cost due to the ERIP. The actuarial liability and normal cost were determined as active members (before the implementation of the ERIP) and as retired members (with the enhanced ERIP benefit).

For active members, average service reflects service as of January 1, 2002 but excludes any enhanced service provided by the ERIP. For retired members, the averages are as of December 31, 2002.

COST ANALYSIS BY GOVERNMENTAL UNIT *(continued)*

Town of Dudley

Actives		Retirees	
Number of Members	10	Number of Members	10
Average Service	24.3	Average Age	56.6
Average Compensation	\$51,919	Average Annual Benefit	\$33,941

	As Actives	As Retirees
Total Regular Compensation	\$519,200	N/A
Total Normal Cost	\$64,900	N/A
Employee Contributions	\$31,200	N/A
Net Employer Normal Cost	\$33,700	N/A
Actuarial Liability (as of December 31, 2002)	\$2,397,800	\$3,409,200

Increase in Actuarial Liability (as of December 31, 2002)	\$1,011,400
Amortization of Increase for FY05 (assumed average payment October 1)	
4.5% annual increasing basis to 2026	\$76,500

The above results provide a measure of the increase in actuarial accrued liability and decrease in normal cost due to the ERIP. The actuarial liability and normal cost were determined as active members (before the implementation of the ERIP) and as retired members (with the enhanced ERIP benefit).

For active members, average service reflects service as of January 1, 2002 but excludes any enhanced service provided by the ERIP. For retired members, the averages are as of December 31, 2002.

COST ANALYSIS BY GOVERNMENTAL UNIT *(continued)*

Town of Grafton – Limited to 9 Employees

Actives		Retirees	
Number of Members	8	Number of Members	8
Average Service	20.5	Average Age	63.3
Average Compensation	\$29,647	Average Annual Benefit	\$17,072

	As Actives	As Retirees
Total Regular Compensation	\$237,200	N/A
Total Normal Cost	\$23,400	N/A
Employee Contributions	\$13,300	N/A
Net Employer Normal Cost	\$10,100	N/A
Actuarial Liability (as of December 31, 2002)	\$1,029,300	\$1,334,700

Increase in Actuarial Liability (as of December 31, 2002)	\$305,400
Amortization of Increase for FY05 (assumed average payment October 1)	
4.5% annual increasing basis to 2026	\$23,100

The above results provide a measure of the increase in actuarial accrued liability and decrease in normal cost due to the ERIP. The actuarial liability and normal cost were determined as active members (before the implementation of the ERIP) and as retired members (with the enhanced ERIP benefit).

For active members, average service reflects service as of January 1, 2002 but excludes any enhanced service provided by the ERIP. For retired members, the averages are as of December 31, 2002.

COST ANALYSIS BY GOVERNMENTAL UNIT *(continued)*

Town of Hardwick

Actives		Retirees	
Number of Members	1	Number of Members	1
Average Service	33.1	Average Age	56.3
Average Compensation	\$46,633	Average Annual Benefit	\$33,266

	As Actives	As Retirees
Total Regular Compensation	\$46,633	N/A
Total Normal Cost	\$2,800	N/A
Employee Contributions	\$2,300	N/A
Net Employer Normal Cost	\$500	N/A
Actuarial Liability (as of December 31, 2002)	\$263,500	\$364,100

Increase in Actuarial Liability (as of December 31, 2002)	\$100,600
Amortization of Increase for FY05 (assumed average payment October 1)	
4.5% annual increasing basis to 2026	\$7,600

The above results provide a measure of the increase in actuarial accrued liability and decrease in normal cost due to the ERIP. The actuarial liability and normal cost were determined as active members (before the implementation of the ERIP) and as retired members (with the enhanced ERIP benefit).

For active members, average service reflects service as of January 1, 2002 but excludes any enhanced service provided by the ERIP. For retired members, the averages are as of December 31, 2002.

COST ANALYSIS BY GOVERNMENTAL UNIT *(continued)*

Town of Holden – Limited to 3 Group 1 and 1 Group 4 Employees

Actives		Retirees	
Number of Members	4	Number of Members	4
Average Service	30.6	Average Age	54.7
Average Compensation	\$55,778	Average Annual Benefit	\$37,239

	As Actives	As Retirees
Total Regular Compensation	\$223,100	N/A
Total Normal Cost	\$19,700	N/A
Employee Contributions	\$11,700	N/A
Net Employer Normal Cost	\$8,000	N/A
Actuarial Liability (as of October 1, 2002)	\$1,174,700	\$1,666,200

Increase in Actuarial Liability (as of October 1, 2002)	\$491,500
Amortization of Increase for FY05 (assumed average payment October 1)	
4.5% annual increasing basis to 2026	\$37,900

The above results provide a measure of the increase in actuarial accrued liability and decrease in normal cost due to the ERIP. The actuarial liability and normal cost were determined as active members (before the implementation of the ERIP) and as retired members (with the enhanced ERIP benefit).

For active members, average service reflects service as of January 1, 2002 but excludes any enhanced service provided by the ERIP. For retired members, the averages are as of December 31, 2002.

COST ANALYSIS BY GOVERNMENTAL UNIT *(continued)*

Town of Hubbardston

Actives	
Number of Members	2
Average Service	16.7
Average Compensation	\$21,730

Retirees	
Number of Members	2
Average Age	63.0
Average Annual Benefit	\$11,323

	As Actives	As Retirees
Total Regular Compensation	\$43,500	N/A
Total Normal Cost	\$6,700	N/A
Employee Contributions	\$2,900	N/A
Net Employer Normal Cost	\$3,800	N/A
Actuarial Liability (as of December 31, 2002)	\$185,100	\$264,200

Increase in Actuarial Liability (as of December 31, 2002)	\$79,100
Amortization of Increase for FY05 (assumed average payment October 1)	
4.5% annual increasing basis to 2026	\$6,000

The above results provide a measure of the increase in actuarial accrued liability and decrease in normal cost due to the ERIP. The actuarial liability and normal cost were determined as active members (before the implementation of the ERIP) and as retired members (with the enhanced ERIP benefit).

For active members, average service reflects service as of January 1, 2002 but excludes any enhanced service provided by the ERIP. For retired members, the averages are as of December 31, 2002.

COST ANALYSIS BY GOVERNMENTAL UNIT *(continued)*

Town of Leicester – Limited to 8 Group 1 and 1 Group 4 Employees

Actives		Retirees	
Number of Members	8	Number of Members	8
Average Service	20.3	Average Age	62.8
Average Compensation	\$24,189	Average Annual Benefit	\$15,379

	As Actives	As Retirees
Total Regular Compensation	\$193,500	N/A
Total Normal Cost	\$25,100	N/A
Employee Contributions	\$10,800	N/A
Net Employer Normal Cost	\$14,300	N/A
Actuarial Liability (as of October 31, 2002)	\$976,600	\$1,368,700

Increase in Actuarial Liability (as of October 31, 2002)	\$392,100
Amortization of Increase for FY05 (assumed average payment October 1)	
4.5% annual increasing basis to 2026	\$30,100

The above results provide a measure of the increase in actuarial accrued liability and decrease in normal cost due to the ERIP. The actuarial liability and normal cost were determined as active members (before the implementation of the ERIP) and as retired members (with the enhanced ERIP benefit).

For active members, average service reflects service as of January 1, 2002 but excludes any enhanced service provided by the ERIP. For retired members, the averages are as of December 31, 2002.

COST ANALYSIS BY GOVERNMENTAL UNIT *(continued)*

Town of Mendon – Limited to 1 Employee

Actives		Retirees	
Number of Members	1	Number of Members	1
Average Service	27.7	Average Age	59.5
Average Compensation	\$34,690	Average Annual Benefit	\$24,037

	As Actives	As Retirees
Total Regular Compensation	\$34,690	N/A
Total Normal Cost	\$2,800	N/A
Employee Contributions	\$2,400	N/A
Net Employer Normal Cost	\$400	N/A
Actuarial Liability (as of December 31, 2002)	\$199,900	\$263,400

Increase in Actuarial Liability (as of December 31, 2002)	\$63,500
Amortization of Increase for FY05 (assumed average payment October 1)	
4.5% annual increasing basis to 2026	\$4,800

The above results provide a measure of the increase in actuarial accrued liability and decrease in normal cost due to the ERIP. The actuarial liability and normal cost were determined as active members (before the implementation of the ERIP) and as retired members (with the enhanced ERIP benefit).

For active members, average service reflects service as of January 1, 2002 but excludes any enhanced service provided by the ERIP. For retired members, the averages are as of December 31, 2002.

COST ANALYSIS BY GOVERNMENTAL UNIT *(continued)*

Town of Millbury

Actives		Retirees	
Number of Members	20	Number of Members	20
Average Service	24.0	Average Age	62.4
Average Compensation	\$33,952	Average Annual Benefit	\$21,825

	As Actives	As Retirees
Total Regular Compensation	\$679,000	N/A
Total Normal Cost	\$86,600	N/A
Employee Contributions	\$37,800	N/A
Net Employer Normal Cost	\$48,800	N/A
Actuarial Liability (as of December 31, 2002)	\$3,791,300	\$4,798,700

Increase in Actuarial Liability (as of December 31, 2002)	\$1,079,400
Amortization of Increase for FY05 (assumed average payment October 1)	
4.5% annual increasing basis to 2026	\$81,700

The above results provide a measure of the increase in actuarial accrued liability and decrease in normal cost due to the ERIP. The actuarial liability and normal cost were determined as active members (before the implementation of the ERIP) and as retired members (with the enhanced ERIP benefit).

For active members, average service reflects service as of January 1, 2002 but excludes any enhanced service provided by the ERIP. For retired members, the averages are as of December 31, 2002.

COST ANALYSIS BY GOVERNMENTAL UNIT *(continued)*

Town of Oxford

Actives	
Number of Members	18
Average Service	22.0
Average Compensation	\$32,329

Retirees	
Number of Members	18
Average Age	60.4
Average Annual Benefit	\$19,867

	As Actives	As Retirees
Total Regular Compensation	\$581,900	N/A
Total Normal Cost	\$79,300	N/A
Employee Contributions	\$36,700	N/A
Net Employer Normal Cost	\$42,600	N/A
Actuarial Liability (as of December 31, 2002)	\$2,979,800	\$4,012,500

Increase in Actuarial Liability (as of December 31, 2002)	\$1,032,700
Amortization of Increase for FY05 (assumed average payment October 1)	
4.5% annual increasing basis to 2026	\$78,100

The above results provide a measure of the increase in actuarial accrued liability and decrease in normal cost due to the ERIP. The actuarial liability and normal cost were determined as active members (before the implementation of the ERIP) and as retired members (with the enhanced ERIP benefit).

For active members, average service reflects service as of January 1, 2002 but excludes any enhanced service provided by the ERIP. For retired members, the averages are as of December 31, 2002.

COST ANALYSIS BY GOVERNMENTAL UNIT *(continued)*

Town of Princeton – Limited to 1 Group 1 Employee

Actives		Retirees	
Number of Members	1	Number of Members	1
Average Service	26.2	Average Age	65.3
Average Compensation	\$25,117	Average Annual Benefit	\$21,708

	As Actives	As Retirees
Total Regular Compensation	\$25,117	N/A
Total Normal Cost	\$2,800	N/A
Employee Contributions	\$1,400	N/A
Net Employer Normal Cost	\$1,400	N/A
Actuarial Liability (as of December 31, 2002)	\$159,600	\$223,000

Increase in Actuarial Liability (as of December 31, 2002)	\$63,400
Amortization of Increase for FY05 (assumed average payment October 1)	
4.5% annual increasing basis to 2026	\$4,800

The above results provide a measure of the increase in actuarial accrued liability and decrease in normal cost due to the ERIP. The actuarial liability and normal cost were determined as active members (before the implementation of the ERIP) and as retired members (with the enhanced ERIP benefit).

For active members, average service reflects service as of January 1, 2002 but excludes any enhanced service provided by the ERIP. For retired members, the averages are as of December 31, 2002.

COST ANALYSIS BY GOVERNMENTAL UNIT *(continued)*

Town of Rutland – Limited to 1 Employee

Actives	
Number of Members	1
Average Service	17.7
Average Compensation	\$37,019

Retirees	
Number of Members	1
Average Age	63.1
Average Annual Benefit	\$19,316

	As Actives	As Retirees
Total Regular Compensation	\$37,019	N/A
Total Normal Cost	\$5,200	N/A
Employee Contributions	\$2,200	N/A
Net Employer Normal Cost	\$3,000	N/A
Actuarial Liability (as of December 31, 2002)	\$155,200	\$202,500

Increase in Actuarial Liability (as of December 31, 2002)	\$47,300
Amortization of Increase for FY05 (assumed average payment October 1)	
4.5% annual increasing basis to 2026	\$3,600

The above results provide a measure of the increase in actuarial accrued liability and decrease in normal cost due to the ERIP. The actuarial liability and normal cost were determined as active members (before the implementation of the ERIP) and as retired members (with the enhanced ERIP benefit).

For active members, average service reflects service as of January 1, 2002 but excludes any enhanced service provided by the ERIP. For retired members, the averages are as of December 31, 2002.

COST ANALYSIS BY GOVERNMENTAL UNIT *(continued)*

Town of Templeton – Limited to 4 Employees

Actives		Retirees	
Number of Members	3	Number of Members	3
Average Service	16.4	Average Age	59.2
Average Compensation	\$33,609	Average Annual Benefit	\$15,499

	As Actives	As Retirees
Total Regular Compensation	\$100,800	N/A
Total Normal Cost	\$18,700	N/A
Employee Contributions	\$7,000	N/A
Net Employer Normal Cost	\$11,700	N/A
Actuarial Liability (as of November 1, 2002)	\$416,500	\$576,600

Increase in Actuarial Liability (as of November 1, 2002)	\$160,100
Amortization of Increase for FY05 (assumed average payment October 1)	
4.5% annual increasing basis to 2026	\$12,300

The above results provide a measure of the increase in actuarial accrued liability and decrease in normal cost due to the ERIP. The actuarial liability and normal cost were determined as active members (before the implementation of the ERIP) and as retired members (with the enhanced ERIP benefit).

For active members, average service reflects service as of January 1, 2002 but excludes any enhanced service provided by the ERIP. For retired members, the averages are as of December 31, 2002.

COST ANALYSIS BY GOVERNMENTAL UNIT *(continued)*

Town of Uxbridge – Limited to 9 Employees

Actives		Retirees	
Number of Members	9	Number of Members	9
Average Service	23.9	Average Age	59.6
Average Compensation	\$36,177	Average Annual Benefit	\$22,679

	As Actives	As Retirees
Total Regular Compensation	\$325,600	N/A
Total Normal Cost	\$40,400	N/A
Employee Contributions	\$19,200	N/A
Net Employer Normal Cost	\$21,200	N/A
Actuarial Liability (as of December 31, 2002)	\$1,769,600	\$2,329,800

Increase in Actuarial Liability (as of December 31, 2002)	\$560,200
Amortization of Increase for FY05 (assumed average payment October 1)	
4.5% annual increasing basis to 2026	\$42,400

The above results provide a measure of the increase in actuarial accrued liability and decrease in normal cost due to the ERIP. The actuarial liability and normal cost were determined as active members (before the implementation of the ERIP) and as retired members (with the enhanced ERIP benefit).

For active members, average service reflects service as of January 1, 2002 but excludes any enhanced service provided by the ERIP. For retired members, the averages are as of December 31, 2002.

COST ANALYSIS BY GOVERNMENTAL UNIT *(continued)*

Town of Warren

Actives		Retirees	
Number of Members	7	Number of Members	7
Average Service	17.0	Average Age	63.1
Average Compensation	\$28,967	Average Annual Benefit	\$17,909

	As Actives	As Retirees
Total Regular Compensation	\$202,800	N/A
Total Normal Cost	\$42,500	N/A
Employee Contributions	\$13,300	N/A
Net Employer Normal Cost	\$29,200	N/A
Actuarial Liability (as of December 31, 2002)	\$936,000	\$1,334,600

Increase in Actuarial Liability (as of December 31, 2002)	\$398,600
Amortization of Increase for FY05 (assumed average payment October 1)	
4.5% annual increasing basis to 2026	\$30,200

The above results provide a measure of the increase in actuarial accrued liability and decrease in normal cost due to the ERIP. The actuarial liability and normal cost were determined as active members (before the implementation of the ERIP) and as retired members (with the enhanced ERIP benefit).

For active members, average service reflects service as of January 1, 2002 but excludes any enhanced service provided by the ERIP. For retired members, the averages are as of December 31, 2002.

COST ANALYSIS BY GOVERNMENTAL UNIT *(continued)*

Town of West Boylston

Actives	
Number of Members	9
Average Service	21.8
Average Compensation	\$31,411

Retirees	
Number of Members	9
Average Age	59.9
Average Annual Benefit	\$18,327

	As Actives	As Retirees
Total Regular Compensation	\$282,700	N/A
Total Normal Cost	\$38,200	N/A
Employee Contributions	\$17,700	N/A
Net Employer Normal Cost	\$20,500	N/A
Actuarial Liability (as of December 31, 2002)	\$1,407,100	\$1,861,900

Increase in Actuarial Liability (as of December 31, 2002)	\$454,800
Amortization of Increase for FY05 (assumed average payment October 1)	
4.5% annual increasing basis to 2026	\$34,400

The above results provide a measure of the increase in actuarial accrued liability and decrease in normal cost due to the ERIP. The actuarial liability and normal cost were determined as active members (before the implementation of the ERIP) and as retired members (with the enhanced ERIP benefit).

For active members, average service reflects service as of January 1, 2002 but excludes any enhanced service provided by the ERIP. For retired members, the averages are as of December 31, 2002.

COST ANALYSIS BY GOVERNMENTAL UNIT *(continued)*

Town of Winchendon – Limited to 2 Group 1 and 2 Group 4 Employees

Actives		Retirees	
Number of Members	4	Number of Members	4
Average Service	30.7	Average Age	55.3
Average Compensation	\$39,558	Average Annual Benefit	\$29,731

	As Actives	As Retirees
Total Regular Compensation	\$158,200	N/A
Total Normal Cost	\$22,300	N/A
Employee Contributions	\$8,700	N/A
Net Employer Normal Cost	\$13,600	N/A
Actuarial Liability (as of August 31, 2002)	\$912,400	\$1,356,600

Increase in Actuarial Liability (as of August 31, 2002)	\$444,200
Amortization of Increase for FY05 (assumed average payment October 1)	
4.5% annual increasing basis to 2026	\$34,500

The above results provide a measure of the increase in actuarial accrued liability and decrease in normal cost due to the ERIP. The actuarial liability and normal cost were determined as active members (before the implementation of the ERIP) and as retired members (with the enhanced ERIP benefit).

For active members, average service reflects service as of January 1, 2002 but excludes any enhanced service provided by the ERIP. For retired members, the averages are as of December 31, 2002.

COST ANALYSIS BY GOVERNMENTAL UNIT *(continued)*

Auburn Water District – Limited to 1 Employee

Actives		Retirees	
Number of Members	1	Number of Members	1
Average Service	14.7	Average Age	60.9
Average Compensation	\$28,327	Average Annual Benefit	\$11,821

	As Actives	As Retirees
Total Regular Compensation	\$28,327	N/A
Total Normal Cost	\$4,100	N/A
Employee Contributions	\$2,100	N/A
Net Employer Normal Cost	\$2,000	N/A
Actuarial Liability (as of December 31, 2002)	\$103,700	\$143,100

Increase in Actuarial Liability (as of December 31, 2002)	\$39,400
Amortization of Increase for FY05 (assumed average payment October 1)	
4.5% annual increasing basis to 2026	\$3,000

The above results provide a measure of the increase in actuarial accrued liability and decrease in normal cost due to the ERIP. The actuarial liability and normal cost were determined as active members (before the implementation of the ERIP) and as retired members (with the enhanced ERIP benefit).

For active members, average service reflects service as of January 1, 2002 but excludes any enhanced service provided by the ERIP. For retired members, the averages are as of December 31, 2002.

COST ANALYSIS BY GOVERNMENTAL UNIT *(continued)*

Dudley-Charlton Regional School District

Actives	
Number of Members	8
Average Service	21.2
Average Compensation	\$25,346

Retirees	
Number of Members	8
Average Age	62.4
Average Annual Benefit	\$14,172

	As Actives	As Retirees
Total Regular Compensation	\$202,800	N/A
Total Normal Cost	\$26,500	N/A
Employee Contributions	\$11,700	N/A
Net Employer Normal Cost	\$14,800	N/A
Actuarial Liability (as of September 1, 2002)	\$987,300	\$1,290,200

Increase in Actuarial Liability (as of September 1, 2002)	\$302,900
Amortization of Increase for FY05 (assumed average payment October 1)	
4.5% annual increasing basis to 2026	\$23,500

The above results provide a measure of the increase in actuarial accrued liability and decrease in normal cost due to the ERIP. The actuarial liability and normal cost were determined as active members (before the implementation of the ERIP) and as retired members (with the enhanced ERIP benefit).

For active members, average service reflects service as of January 1, 2002 but excludes any enhanced service provided by the ERIP. For retired members, the averages are as of December 31, 2002.

COST ANALYSIS BY GOVERNMENTAL UNIT *(continued)*

Mendon-Upton Regional School District – Limited to 3 Employees

Actives		Retirees	
Number of Members	1	Number of Members	1
Average Service	33.0	Average Age	63.2
Average Compensation	\$29,775	Average Annual Benefit	\$23,881

	As Actives	As Retirees
Total Regular Compensation	\$29,775	N/A
Total Normal Cost	\$3,400	N/A
Employee Contributions	\$1,300	N/A
Net Employer Normal Cost	\$2,100	N/A
Actuarial Liability (as of December 31, 2002)	\$199,100	\$252,400

Increase in Actuarial Liability (as of December 31, 2002)	\$53,300
Amortization of Increase for FY05 (assumed average payment October 1)	
4.5% annual increasing basis to 2026	\$4,000

The above results provide a measure of the increase in actuarial accrued liability and decrease in normal cost due to the ERIP. The actuarial liability and normal cost were determined as active members (before the implementation of the ERIP) and as retired members (with the enhanced ERIP benefit).

For active members, average service reflects service as of January 1, 2002 but excludes any enhanced service provided by the ERIP. For retired members, the averages are as of December 31, 2002.

COST ANALYSIS BY GOVERNMENTAL UNIT *(continued)*

Narragansett Regional School District – Limited to 3 Employees

Actives		Retirees	
Number of Members	3	Number of Members	3
Average Service	27.1	Average Age	59.0
Average Compensation	\$35,020	Average Annual Benefit	\$22,615

	As Actives	As Retirees
Total Regular Compensation	\$105,100	N/A
Total Normal Cost	\$8,200	N/A
Employee Contributions	\$6,100	N/A
Net Employer Normal Cost	\$2,100	N/A
Actuarial Liability (as of December 31, 2002)	\$588,400	\$774,500

Increase in Actuarial Liability (as of December 31, 2002)	\$186,100
Amortization of Increase for FY05 (assumed average payment October 1)	
4.5% annual increasing basis to 2026	\$14,100

The above results provide a measure of the increase in actuarial accrued liability and decrease in normal cost due to the ERIP. The actuarial liability and normal cost were determined as active members (before the implementation of the ERIP) and as retired members (with the enhanced ERIP benefit).

For active members, average service reflects service as of January 1, 2002 but excludes any enhanced service provided by the ERIP. For retired members, the averages are as of December 31, 2002.

COST ANALYSIS BY GOVERNMENTAL UNIT *(continued)*

Quabbin Regional School District – Limited to 10 Group 1 Employees

Actives		Retirees	
Number of Members	9	Number of Members	9
Average Service	20.2	Average Age	61.2
Average Compensation	\$25,053	Average Annual Benefit	\$13,908

	As Actives	As Retirees
Total Regular Compensation	\$225,500	N/A
Total Normal Cost	\$30,700	N/A
Employee Contributions	\$14,400	N/A
Net Employer Normal Cost	\$16,300	N/A
Actuarial Liability (as of September 15, 2002)	\$1,020,900	\$1,413,400

Increase in Actuarial Liability (as of September 15, 2002)	\$392,500
Amortization of Increase for FY05 (assumed average payment October 1)	
4.5% annual increasing basis to 2026	\$30,400

The above results provide a measure of the increase in actuarial accrued liability and decrease in normal cost due to the ERIP. The actuarial liability and normal cost were determined as active members (before the implementation of the ERIP) and as retired members (with the enhanced ERIP benefit).

For active members, average service reflects service as of January 1, 2002 but excludes any enhanced service provided by the ERIP. For retired members, the averages are as of December 31, 2002.

COST ANALYSIS BY GOVERNMENTAL UNIT *(continued)*

Quaboag Regional School District

Actives	
Number of Members	5
Average Service	25.3
Average Compensation	\$27,333

Retirees	
Number of Members	5
Average Age	58.8
Average Annual Benefit	\$16,487

	As Actives	As Retirees
Total Regular Compensation	\$136,700	N/A
Total Normal Cost	\$12,200	N/A
Employee Contributions	\$7,200	N/A
Net Employer Normal Cost	\$5,000	N/A
Actuarial Liability (as of December 31, 2002)	\$740,000	\$972,300

Increase in Actuarial Liability (as of December 31, 2002)	\$232,300
Amortization of Increase for FY05 (assumed average payment October 1)	
4.5% annual increasing basis to 2026	\$17,600

The above results provide a measure of the increase in actuarial accrued liability and decrease in normal cost due to the ERIP. The actuarial liability and normal cost were determined as active members (before the implementation of the ERIP) and as retired members (with the enhanced ERIP benefit).

For active members, average service reflects service as of January 1, 2002 but excludes any enhanced service provided by the ERIP. For retired members, the averages are as of December 31, 2002.

COST ANALYSIS BY GOVERNMENTAL UNIT *(continued)*

Southboro Housing Authority – Limited to 1 Employee

Actives		Retirees	
Number of Members	1	Number of Members	1
Average Service	20.1	Average Age	62.1
Average Compensation	\$61,668	Average Annual Benefit	\$35,211

	As Actives	As Retirees
Total Regular Compensation	\$61,668	N/A
Total Normal Cost	\$6,400	N/A
Employee Contributions	\$4,300	N/A
Net Employer Normal Cost	\$2,100	N/A
Actuarial Liability (as of December 31, 2002)	\$282,700	\$366,200

Increase in Actuarial Liability (as of December 31, 2002)	\$83,500
Amortization of Increase for FY05 (assumed average payment October 1)	
4.5% annual increasing basis to 2026	\$6,300

The above results provide a measure of the increase in actuarial accrued liability and decrease in normal cost due to the ERIP. The actuarial liability and normal cost were determined as active members (before the implementation of the ERIP) and as retired members (with the enhanced ERIP benefit).

For active members, average service reflects service as of January 1, 2002 but excludes any enhanced service provided by the ERIP. For retired members, the averages are as of December 31, 2002.

COST ANALYSIS BY GOVERNMENTAL UNIT *(continued)*

Spencer-East Brookfield Regional School District

Actives		Retirees	
Number of Members	5	Number of Members	5
Average Service	18.5	Average Age	60.7
Average Compensation	\$22,444	Average Annual Benefit	\$11,859

	As Actives	As Retirees
Total Regular Compensation	\$112,200	N/A
Total Normal Cost	\$14,700	N/A
Employee Contributions	\$7,800	N/A
Net Employer Normal Cost	\$6,900	N/A
Actuarial Liability (as of December 31, 2002)	\$529,100	\$708,300

Increase in Actuarial Liability (as of December 31, 2002)	\$179,200
Amortization of Increase for FY05 (assumed average payment October 1)	
4.5% annual increasing basis to 2026	\$13,600

The above results provide a measure of the increase in actuarial accrued liability and decrease in normal cost due to the ERIP. The actuarial liability and normal cost were determined as active members (before the implementation of the ERIP) and as retired members (with the enhanced ERIP benefit).

For active members, average service reflects service as of January 1, 2002 but excludes any enhanced service provided by the ERIP. For retired members, the averages are as of December 31, 2002.

COST ANALYSIS BY GOVERNMENTAL UNIT *(continued)*

Templeton Housing Authority – Limited to 2 Employees

Actives		Retirees	
Number of Members	2	Number of Members	2
Average Service	26.8	Average Age	60.4
Average Compensation	\$35,466	Average Annual Benefit	\$25,933

	As Actives	As Retirees
Total Regular Compensation	\$70,900	N/A
Total Normal Cost	\$9,600	N/A
Employee Contributions	\$4,800	N/A
Net Employer Normal Cost	\$4,800	N/A
Actuarial Liability (as of December 31, 2002)	\$399,600	\$561,200

Increase in Actuarial Liability (as of December 31, 2002)	\$161,600
Amortization of Increase for FY05 (assumed average payment October 1)	
4.5% annual increasing basis to 2026	\$12,200

The above results provide a measure of the increase in actuarial accrued liability and decrease in normal cost due to the ERIP. The actuarial liability and normal cost were determined as active members (before the implementation of the ERIP) and as retired members (with the enhanced ERIP benefit).

For active members, average service reflects service as of January 1, 2002 but excludes any enhanced service provided by the ERIP. For retired members, the averages are as of December 31, 2002.

COST ANALYSIS BY GOVERNMENTAL UNIT *(continued)*

Wachusett Regional School District

Actives	
Number of Members	13
Average Service	24.0
Average Compensation	\$21,479

Retirees	
Number of Members	13
Average Age	62.9
Average Annual Benefit	\$12,837

	As Actives	As Retirees
Total Regular Compensation	\$279,200	N/A
Total Normal Cost	\$23,400	N/A
Employee Contributions	\$14,700	N/A
Net Employer Normal Cost	\$8,700	N/A
Actuarial Liability (as of December 31, 2002)	\$1,485,900	\$1,915,300

Increase in Actuarial Liability (as of December 31, 2002)	\$429,400
Amortization of Increase for FY05 (assumed average payment October 1)	
4.5% annual increasing basis to 2026	\$32,500

The above results provide a measure of the increase in actuarial accrued liability and decrease in normal cost due to the ERIP. The actuarial liability and normal cost were determined as active members (before the implementation of the ERIP) and as retired members (with the enhanced ERIP benefit).

For active members, average service reflects service as of January 1, 2002 but excludes any enhanced service provided by the ERIP. For retired members, the averages are as of December 31, 2002.

COST ANALYSIS BY GOVERNMENTAL UNIT *(continued)*

Westborough Housing Authority – Limited to 1 Employee

Actives		Retirees	
Number of Members	1	Number of Members	1
Average Service	14.9	Average Age	59.7
Average Compensation	\$34,023	Average Annual Benefit	\$13,595

	As Actives	As Retirees
Total Regular Compensation	\$34,023	N/A
Total Normal Cost	\$4,900	N/A
Employee Contributions	\$2,600	N/A
Net Employer Normal Cost	\$2,300	N/A
Actuarial Liability (as of November 30, 2002)	\$117,000	\$154,800

Increase in Actuarial Liability (as of November 30, 2002)	\$37,800
Amortization of Increase for FY05 (assumed average payment October 1)	
4.5% annual increasing basis to 2026	\$2,900

The above results provide a measure of the increase in actuarial accrued liability and decrease in normal cost due to the ERIP. The actuarial liability and normal cost were determined as active members (before the implementation of the ERIP) and as retired members (with the enhanced ERIP benefit).

For active members, average service reflects service as of January 1, 2002 but excludes any enhanced service provided by the ERIP. For retired members, the averages are as of December 31, 2002.

COST ANALYSIS BY GOVERNMENTAL UNIT *(continued)*

Winchendon Housing Authority – Limited to 1 Employee

Actives		Retirees	
Number of Members	1	Number of Members	1
Average Service	12.7	Average Age	57.8
Average Compensation	\$24,492	Average Annual Benefit	\$7,887

	As Actives	As Retirees
Total Regular Compensation	\$24,492	N/A
Total Normal Cost	\$3,300	N/A
Employee Contributions	\$1,800	N/A
Net Employer Normal Cost	\$1,500	N/A
Actuarial Liability (as of June 30, 2002)	\$72,100	\$106,200

Increase in Actuarial Liability (as of June 30, 2002)	\$34,100
Amortization of Increase for FY05 (assumed average payment October 1)	
4.5% annual increasing basis to 2026	\$2,700

The above results provide a measure of the increase in actuarial accrued liability and decrease in normal cost due to the ERIP. The actuarial liability and normal cost were determined as active members (before the implementation of the ERIP) and as retired members (with the enhanced ERIP benefit).

For active members, average service reflects service as of January 1, 2002 but excludes any enhanced service provided by the ERIP. For retired members, the averages are as of December 31, 2002.

COST ANALYSIS BY GOVERNMENTAL UNIT *(continued)*

Worcester Regional Retirement System – Limited to 2 Employees

Actives		Retirees	
Number of Members	2	Number of Members	2
Average Service	29.4	Average Age	55.3
Average Compensation	\$50,739	Average Annual Benefit	\$33,775

	As Actives	As Retirees
Total Regular Compensation	\$101,500	N/A
Total Normal Cost	\$6,300	N/A
Employee Contributions	\$5,900	N/A
Net Employer Normal Cost	\$400	N/A
Actuarial Liability (as of January 31, 2003)	\$525,600	\$771,400

Increase in Actuarial Liability (as of January 31, 2003)	\$245,800
Amortization of Increase for FY05 (assumed average payment October 1)	
4.5% annual increasing basis to 2026	\$18,500

The above results provide a measure of the increase in actuarial accrued liability and decrease in normal cost due to the ERIP. The actuarial liability and normal cost were determined as active members (before the implementation of the ERIP) and as retired members (with the enhanced ERIP benefit).

For active members, average service reflects service as of January 1, 2002 but excludes any enhanced service provided by the ERIP. For retired members, the averages are as of December 31, 2002.

EFFECT ON FUNDING SCHEDULE

Amortization of the Increase in Actuarial Accrued Liability

The bottom section of the cost page for each governmental unit shows the amortization of the increase in actuarial accrued liability on a 22-year, 4.5% increasing amortization basis. This basis requires a funding amount of \$866,900 for FY05 and increases 4.5% each year until FY26. The allocation to each governmental unit is summarized below. Future system appropriations will reflect these unit costs.

Governmental Unit	4.5%increasing, 22-year Effective FY05
Town of Ashburnham	\$18,300
Town of Auburn	\$100,800
Town of Barre	\$3,300
Town of Bolton	\$9,900
Town of Boylston	\$7,500
Town of Brookfield	\$5,000
Town of Charlton	\$25,600
Town of Douglas	\$7,200
Town of Dudley	\$76,500
Town of Grafton	\$23,100
Town of Hardwick	\$7,600
Town of Holden	\$37,900
Town of Hubbardston	\$6,000
Town of Leicester	\$30,100
Town of Mendon	\$4,800
Town of Millbury	\$81,700
Town of Oxford	\$78,100
Town of Princeton	\$4,800
Town of Rutland	\$3,600
Town of Templeton	\$12,300
Town of Uxbridge	\$42,400
Town of Warren	\$30,200
Town of West Boylston	\$34,400
Town of Winchendon	\$34,500
Auburn Water District	\$3,000
Dudley-Charlton Regional School District	\$23,500
Mendon-Upton Regional School District	\$4,000
Narragansett Regional School District	\$14,100
Quabbin Regional School District	\$30,400
Quaboag Regional School District	\$17,600
Southboro Housing Authority	\$6,300
Spencer-East Brookfield Regional School District	\$13,600
Templeton Housing Authority	\$12,200
Wachusett Regional School District	\$32,500
Westborough Housing Authority	\$2,900
Winchendon Housing Authority	\$2,700
Worcester Regional Retirement System	\$18,500
Total	\$866,900

The legislation did not specify how the increased cost should be amortized under the schedule. The Board indicated that the ERIP will be funded on a 22-year, 4.5% increasing basis.

EFFECT ON FUNDING SCHEDULE *(continued)*

Decrease in Normal Cost

There is a decrease in employer normal cost for all units of approximately \$407,500 in FY03 for retiring members since normal cost accrues only for active members. This decrease is only expected to last a few years (the period the member would have remained in service if the ERIP were not implemented). This decrease will be partially offset by the normal cost for any members hired to replace retiring members. Any decrease in employer normal cost will be reflected in future actuarial valuations and corresponding funding schedules. We have not estimated the normal cost for new hires as part of this study.

ACTUARIAL ASSUMPTIONS *(continued)*

Retirement

Age	Groups 1 & 2		Group 4
	Male	Female	
45	0.000	0.000	0.010
46	0.000	0.000	0.010
47	0.000	0.000	0.010
48	0.000	0.000	0.010
49	0.000	0.000	0.010
50	0.010	0.015	0.020
51	0.010	0.015	0.020
52	0.010	0.020	0.020
53	0.010	0.025	0.050
54	0.020	0.025	0.075
55	0.020	0.055	0.150
56	0.025	0.065	0.100
57	0.025	0.065	0.100
58	0.050	0.065	0.100
59	0.065	0.065	0.150
60	0.120	0.050	0.200
61	0.200	0.130	0.200
62	0.300	0.150	0.250
63	0.250	0.125	0.250
64	0.220	0.180	0.300
65	0.400	0.150	1.000
66	0.250	0.200	1.000
67	0.250	0.200	1.000
68	0.300	0.250	1.000
69	0.300	0.200	1.000
70	1.000	1.000	1.000

ACTUARIAL ASSUMPTIONS *(continued)*

Disability Based on an analysis of past experience. Sample annual rates are shown below.

Age	<u>Groups 1 & 2</u>	Group 4
20	0.00010	0.0010
30	0.00030	0.0030
40	0.00101	0.0030
50	0.00192	0.0125
60	0.00280	0.0085

Based on an analysis of past experience. It is also assumed that the percentage of job-related disabilities is 55% for Groups 1 & 2 and 90% for Group 4.

Withdrawal

Based on analysis of past experience. Annual rates are based on years of service. Sample annual rates for Groups 1 and 2 are shown below. For Group 4 members the rate is 0.015 each year for service up to and including 10 years. No withdrawal is assumed thereafter.

Groups 1 & 2

Service	Groups 1 & 2
0	0.150
5	0.076
10	0.054
15	0.033
20	0.020

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