

MEMORANDUM

TO: All Retirement Boards
FROM: *Joseph E. Connarton*
Joseph E. Connarton, Executive Director
RE: Follow up to PERAC Memoranda # 4/2013 and # 7/2013
DATE: March 29, 2013

On January 15, 2013, PERAC issued Memorandum #7/2013 to the Retirement Boards. This memorandum reminded retirement boards that pursuant to G.L. c. 32, §3(8)(b) as amended by Section 9 of Chapter 176 of the Acts of 2011, certain buybacks, depending upon a number of factors, would be calculated using actuarial assumed interest.

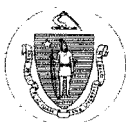
Enclosed are the revised repayment worksheet, make up worksheet and the cumulative interest factor sheet for calendar year 2013 using actuarial assumed interest.

If you have any questions or need assistance in using this form, do not hesitate to call John Boorack at 617-666-4446 ext. 935.

Enclosures

JEC/jfb

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REPAYMENT WORKSHEET FOR BUYBACKS IN 2013 - ACTUARIAL INTEREST

For Buybacks made under G.L. c. 32 §§ 3(6)(c), 3(6)(d) and 3(8)(b)

Name: _____ Social Security Number: _____

Date of Refund: ____ / ____ / ____ Investment Return
 Date of Repayment: ____ / ____ / ____ Assumption: _____ %
 Amount of Refund: \$ _____

Periods of Service Covered by Refund:	Amount Of Service:
From: ____ / ____ / ____ To: ____ / ____ / ____	_____ yrs. _____ mos.
From: ____ / ____ / ____ To: ____ / ____ / ____	_____ yrs. _____ mos.

Calculation of the Partial Year Interest Factor in the Year of Refund (Used in Line (2) below):

	<u>7.50%</u>	<u>7.75%</u>	<u>7.875%</u>	<u>8.00%</u>	<u>8.125%</u>	<u>8.25%</u>	<u>8.50%</u>
Monthly Interest Factor:	0.00625	0.006458	0.006563	0.006667	0.006771	0.006875	0.007083
13 - _____ = _____ x _____ = _____							
(Month of Refund)			(Monthly Factor)				

Interest Factor for Current Year (Used in Line (7) below):

Interest rate:	<u>7.50%</u>	<u>7.75%</u>	<u>7.875%</u>	<u>8.00%</u>	<u>8.125%</u>	<u>8.25%</u>	<u>8.50%</u>
January:	0.006250	0.006458	0.006563	0.006667	0.006771	0.006875	0.007083
February:	0.012500	0.012917	0.013125	0.013333	0.013542	0.013750	0.014167
March:	0.018750	0.019375	0.019688	0.020000	0.020313	0.020625	0.021250
April:	0.025000	0.025833	0.026250	0.026667	0.027083	0.027500	0.028333
May:	0.031250	0.032292	0.032813	0.033333	0.033854	0.034375	0.035417
June:	0.037500	0.038750	0.039375	0.040000	0.040625	0.041250	0.042500
July:	0.043750	0.045208	0.045938	0.046667	0.047396	0.048125	0.049583
August:	0.050000	0.051667	0.052500	0.053333	0.054167	0.055000	0.056667
September:	0.056250	0.058125	0.059063	0.060000	0.060938	0.061875	0.063750
October:	0.062500	0.064583	0.065625	0.066667	0.067708	0.068750	0.070833
November:	0.068750	0.071042	0.072188	0.073333	0.074479	0.075625	0.077917
December:	0.075000	0.077500	0.078750	0.080000	0.081250	0.082500	0.085000

Calculation of the Repayment Amount:

Year of Refund

Amount Refunded: _____ (1)

Partial Year Interest Factor: _____ (2)

Partial Year Interest (1) x (2): _____ (3)

Balance as of 12/31/ (1) + (3): _____ (4)

From Year of Refund to Beginning of Current Year

Cumulative Interest Factor to 12/31/2012: _____ (5)

Balance as of 12/31/2012 (4) x (5): _____ (6)

Current Year

Interest Factor to End of Month: _____ (7)

Interest (6) x (7): _____ (8)

Amount of Repayment (6) + (8): _____ (9)

2013 MAKE-UP WORKSHEET

For Make-ups under G.L. c. 32, §§3(3), 3(4), 3(4A), 3(5), 4(1)(g^{1/2}), 4(1)(l), 4(1)(l^{1/2}), 4(1)(l^{3/4}), 4(1)(n), 4(1)(n^{1/2}), 4(1)(p), 4(1)(r), 4(1)(s) and 4(2)(c)

NAME _____

YEAR	SALARY EARNED	DED. RATE	DEDUCTIONS	INTEREST FACTOR	AMOUNT TO BE REPAID
1965					
1966					
1967					
1968					
1969					
1970					
1971					
1972					
1973					
1974					
1975					
1976					
1977					
1978					
1979					
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2002					
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2004					
2005					
2006					
2007					
2008					
2009					
2010					
2011					
2012					

Subtotal on 12/31/2012 _____ (A)
 Monthly Interest Rate _____ (B) X _____ Months = _____ (C) (A) X (C) _____ (D)
 Grand Total ____ /31/2013 (A)+(D) _____

Cumulative Interest Factors for Buybacks/Make-Ups using the full Actuarial Interest Rates
 For Buybacks/Make-Ups made under G.L. c. 32 §§ 3(3), 3(4), 3(4A), 3(5), 3(6)(c), 3(6)(d), 3(8)(b),
 4(1)(g)½, 4(1)(l), 4(1)(l)½, 4(1)(l)¾, 4(1)(n), 4(1)(n)½, 4(1)(p), 4(1)(r), 4(1)(s) and 4(2)(c)

<u>Year</u>	<u>7.50%</u>	<u>7.75%</u>	<u>7.875%</u>	<u>8.00%</u>	<u>8.125%</u>	<u>8.25%</u>	<u>8.50%</u>
1965	29.936296	33.389680	35.259659	37.231985	39.312184	41.506076	46.259154
1966	27.847717	30.988102	32.685663	34.474060	36.358089	38.342795	42.635165
1967	25.904853	28.759259	30.299572	31.920426	33.625978	35.420596	39.295083
1968	24.097538	26.690728	28.087668	29.555950	31.099170	32.721105	36.216666
1969	22.416314	24.770977	26.037236	27.366620	28.762238	30.227349	33.379416
1970	20.852385	22.989306	24.136488	25.339463	26.600914	27.923648	30.764439
1971	19.397567	21.335783	22.374496	23.462466	24.602001	25.795518	28.354322
1972	18.044248	19.801191	20.741132	21.724506	22.753296	23.829578	26.133016
1973	16.785347	18.376975	19.227005	20.115283	21.043511	22.013467	24.085729
1974	15.614276	17.055197	17.823411	18.625262	19.462207	20.335766	22.198829
1975	14.524908	15.828489	16.522281	17.245613	17.999729	18.785927	20.459750
1976	13.511542	14.690013	15.316135	15.968160	16.647148	17.354205	18.856912
1977	12.568876	13.633423	14.198039	14.785333	15.396206	16.031598	17.379642
1978	11.691978	12.652829	13.161566	13.690123	14.239266	14.809790	16.018103
1979	10.876259	11.742765	12.200756	12.676040	13.169263	13.681099	14.763229
1980	10.117450	10.898158	11.310087	11.737074	12.179665	12.638429	13.606663
1981	9.411581	10.114300	10.484438	10.867661	11.264430	11.675223	12.540703
1982	8.754959	9.386821	9.719062	10.062649	10.417970	10.785425	11.558252
1983	8.144148	8.711667	9.009559	9.317268	9.635117	9.963441	10.652767
1984	7.575952	8.085074	8.351851	8.627100	8.911091	9.204103	9.818218
1985	7.047397	7.503549	7.742156	7.988056	8.241471	8.502636	9.049049
1986	6.555718	6.963851	7.176970	7.396348	7.622170	7.854629	8.340137
1987	6.098342	6.462971	6.653043	6.848470	7.049406	7.256008	7.686762
1988	5.672876	5.998117	6.167363	6.341176	6.519682	6.703010	7.084573
1989	5.277094	5.566698	5.717138	5.871459	6.029764	6.192157	6.529560
1990	4.908925	5.166309	5.299780	5.436536	5.576660	5.720237	6.018028
1991	4.566442	4.794718	4.912890	5.033830	5.157605	5.284284	5.546570
1992	4.247853	4.449854	4.554243	4.660954	4.770039	4.881556	5.112046
1993	3.951491	4.129795	4.221778	4.315698	4.411597	4.509521	4.711563
1994	3.675806	3.832756	3.913583	3.996017	4.080090	4.165839	4.342454
1995	3.419354	3.557082	3.627887	3.700016	3.773494	3.848350	4.002262
1996	3.180794	3.301236	3.363047	3.425941	3.489937	3.555058	3.688721
1997	2.958878	3.063792	3.117541	3.172168	3.227687	3.284118	3.399743
1998	2.752445	2.843426	2.889957	2.937193	2.985144	3.033827	3.133404
1999	2.560414	2.638910	2.678987	2.719623	2.760827	2.802612	2.887930
2000	2.381780	2.449104	2.483418	2.518169	2.553366	2.589018	2.661687
2001	2.215609	2.272950	2.302126	2.331638	2.361495	2.391703	2.453168
2002	2.061032	2.109466	2.134068	2.158924	2.184042	2.209425	2.260984
2003	1.917239	1.957741	1.978279	1.999004	2.019923	2.041039	2.083856
2004	1.783478	1.816929	1.833862	1.850930	1.868137	1.885486	1.920605
2005	1.659049	1.686245	1.699988	1.713824	1.727757	1.741788	1.770143
2006	1.543301	1.564961	1.575887	1.586874	1.597926	1.609042	1.631468
2007	1.435629	1.452400	1.460845	1.469328	1.477851	1.486413	1.503657
2008	1.335469	1.347935	1.354202	1.360489	1.366799	1.373130	1.385859
2009	1.242297	1.250984	1.255344	1.259712	1.264092	1.268480	1.277289
2010	1.155625	1.161006	1.163702	1.166400	1.169102	1.171806	1.177225
2011	1.075000	1.077500	1.078750	1.080000	1.081250	1.082500	1.085000
2012	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

Monthly interest rate to be used in item (B) of the Make-up worksheet

<u>7.50%</u>	<u>7.75%</u>	<u>7.875%</u>	<u>8.00%</u>	<u>8.125%</u>	<u>8.25%</u>	<u>8.50%</u>
0.00625	0.006458	0.006563	0.006667	0.006771	0.006875	0.007083