

# REPAYMENT WORKSHEET FOR BUYBACKS IN 2014 - BUYBACK 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>7.00%</u>	<u>7.50%</u>	<u>7.625%</u>	<u>7.75%</u>	<u>7.875%</u>	<u>7.95%</u>	<u>8.00%</u>	<u>8.125%</u>	<u>8.25%</u>
Monthly Interest Factor:	0.002917	0.003125	0.003177	0.003229	0.003281	0.003313	0.003333	0.003385	0.003438

13 - \_\_\_\_\_ = \_\_\_\_\_ x \_\_\_\_\_ = \_\_\_\_\_  
(Month of Refund)                      (Monthly Factor)

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

Interest rate:	<u>7.00%</u>	<u>7.50%</u>	<u>7.625%</u>	<u>7.75%</u>	<u>7.875%</u>	<u>7.95%</u>	<u>8.00%</u>	<u>8.125%</u>	<u>8.25%</u>
<b>January:</b>	0.002917	0.003125	0.003177	0.003229	0.003281	0.003313	0.003333	0.003385	0.003438
<b>February:</b>	0.005833	0.006250	0.006354	0.006458	0.006563	0.006625	0.006667	0.006771	0.006875
<b>March:</b>	0.008750	0.009375	0.009531	0.009688	0.009844	0.009938	0.010000	0.010156	0.010313
<b>April:</b>	0.011667	0.012500	0.012708	0.012917	0.013125	0.013250	0.013333	0.013542	0.013750
<b>May:</b>	0.014583	0.015625	0.015885	0.016146	0.016406	0.016563	0.016667	0.016927	0.017188
<b>June:</b>	0.017500	0.018750	0.019063	0.019375	0.019688	0.019875	0.020000	0.020313	0.020625
<b>July:</b>	0.020417	0.021875	0.022240	0.022604	0.022969	0.023188	0.023333	0.023698	0.024063
<b>August:</b>	0.023333	0.025000	0.025417	0.025833	0.026250	0.026500	0.026667	0.027083	0.027500
<b>September:</b>	0.026250	0.028125	0.028594	0.029063	0.029531	0.029813	0.030000	0.030469	0.030938
<b>October:</b>	0.029167	0.031250	0.031771	0.032292	0.032813	0.033125	0.033333	0.033854	0.034375
<b>November:</b>	0.032083	0.034375	0.034948	0.035521	0.036094	0.036438	0.036667	0.037240	0.037813
<b>December:</b>	0.035000	0.037500	0.038125	0.038750	0.039375	0.039750	0.040000	0.040625	0.041250

**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 12/31/2013: \_\_\_\_\_ (5)

Balance as of 12/31/2013 (4) x (5): \_\_\_\_\_ (6)

*Current Year*

Interest Factor to End of Month: \_\_\_\_\_ (7)

Interest (6) x (7): \_\_\_\_\_ (8)

Amount of Repayment (6) + (8): \_\_\_\_\_ (9)

# REPAYMENT WORKSHEET FOR BUYBACKS IN 2014 - 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>7.00%</u>	<u>7.50%</u>	<u>7.625%</u>	<u>7.75%</u>	<u>7.875%</u>	<u>7.95%</u>	<u>8.00%</u>	<u>8.125%</u>	<u>8.25%</u>
Monthly Interest Factor:	0.005833	0.00625	0.006354	0.006458	0.006563	0.006625	0.006667	0.006771	0.006875

13 - \_\_\_\_\_ = \_\_\_\_\_ x \_\_\_\_\_ = \_\_\_\_\_  
(Month of Refund)                      (Monthly Factor)

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

Interest rate:	<u>7.00%</u>	<u>7.50%</u>	<u>7.625%</u>	<u>7.75%</u>	<u>7.875%</u>	<u>7.95%</u>	<u>8.00%</u>	<u>8.125%</u>	<u>8.25%</u>
<b>January:</b>	0.005833	0.006250	0.006354	0.006458	0.006563	0.006625	0.006667	0.006771	0.006875
<b>February:</b>	0.011667	0.012500	0.012708	0.012917	0.013125	0.013250	0.013333	0.013542	0.013750
<b>March:</b>	0.017500	0.018750	0.019063	0.019375	0.019688	0.019875	0.020000	0.020313	0.020625
<b>April:</b>	0.023333	0.025000	0.025417	0.025833	0.026250	0.026500	0.026667	0.027083	0.027500
<b>May:</b>	0.029167	0.031250	0.031771	0.032292	0.032813	0.033125	0.033333	0.033854	0.034375
<b>June:</b>	0.035000	0.037500	0.038125	0.038750	0.039375	0.039750	0.040000	0.040625	0.041250
<b>July:</b>	0.040833	0.043750	0.044479	0.045208	0.045938	0.046375	0.046667	0.047396	0.048125
<b>August:</b>	0.046667	0.050000	0.050833	0.051667	0.052500	0.053000	0.053333	0.054167	0.055000
<b>September:</b>	0.052500	0.056250	0.057188	0.058125	0.059063	0.059625	0.060000	0.060938	0.061875
<b>October:</b>	0.058333	0.062500	0.063542	0.064583	0.065625	0.066250	0.066667	0.067708	0.068750
<b>November:</b>	0.064167	0.068750	0.069896	0.071042	0.072188	0.072875	0.073333	0.074479	0.075625
<b>December:</b>	0.070000	0.075000	0.076250	0.077500	0.078750	0.079500	0.080000	0.081250	0.082500

**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 12/31/2013: \_\_\_\_\_ (5)

Balance as of 12/31/2013 (4) x (5): \_\_\_\_\_ (6)

*Current Year*

Interest Factor to End of Month: \_\_\_\_\_ (7)

Interest (6) x (7): \_\_\_\_\_ (8)

Amount of Repayment (6) + (8): \_\_\_\_\_ (9)

**2014 MAKE-UP WORKSHEET**

For Make-ups under G.L. c. 32, §§3(3), 3(4), 3(4A), 3(5), 4(1)(g<sup>1/2</sup>), 4(1)(l), 4(1)(l<sup>1/2</sup>), 4(1)(l<sup>3/4</sup>), 4(1)(n), 4(1)(n<sup>1/2</sup>), 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
1966					
1967					
1968					
1969					
1970					
1971					
1972					
1973					
1974					
1975					
1976					
1977					
1978					
1979					
1980					
1981					
1982					
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2001					
2002					
2003					
2004					
2005					
2006					
2007					
2008					
2009					
2010					
2011					
2012					
2013					

Subtotal on 12/31/2013 \_\_\_\_\_ (A)

Monthly Interest Rate \_\_\_\_\_ (B) X \_\_\_\_\_ Months = \_\_\_\_\_ (C) (A) X (C) \_\_\_\_\_ (D)

Grand Total \_\_\_\_ /31/2014 (A)+(D) \_\_\_\_\_

**Cumulative Interest Factors for Buybacks/Make-Ups - BUYBACK INTEREST**

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)

<b>Year</b>	<b>7.00%</b>	<b>7.50%</b>	<b>7.625%</b>	<b>7.75%</b>	<b>7.875%</b>	<b>7.95%</b>	<b>8.00%</b>	<b>8.125%</b>	<b>8.25%</b>
1966	5.037284	5.642102	5.804082	5.970610	6.141812	6.246830	6.317816	6.498752	6.684758
1967	4.866941	5.438171	5.590928	5.747880	5.909140	6.008011	6.074823	6.245047	6.419935
1968	4.702359	5.241610	5.385602	5.533458	5.685282	5.778323	5.841176	6.001247	6.165604
1969	4.543342	5.052155	5.187816	5.327036	5.469904	5.557416	5.616515	5.766964	5.921349
1970	4.389702	4.869547	4.997294	5.128314	5.262686	5.344954	5.400495	5.541827	5.686769
1971	4.241258	4.693539	4.813770	4.937005	5.063318	5.140614	5.192784	5.325480	5.461483
1972	4.097834	4.523893	4.636984	4.752832	4.871502	4.944087	4.993061	5.117578	5.245122
1973	3.959260	4.360379	4.466692	4.575531	4.686954	4.755073	4.801021	4.917793	5.037332
1974	3.825372	4.202775	4.302653	4.404843	4.509396	4.573285	4.616366	4.725807	4.837774
1975	3.696011	4.050867	4.144639	4.240523	4.338565	4.398446	4.438813	4.541316	4.646121
1976	3.571025	3.904450	3.992428	4.082332	4.174206	4.230292	4.268090	4.364027	4.462061
1977	3.450266	3.763326	3.845806	3.930043	4.016073	4.068567	4.103933	4.193660	4.285293
1978	3.333590	3.627302	3.704569	3.783435	3.863931	3.913024	3.946089	4.029943	4.115527
1979	3.220860	3.496194	3.568520	3.642296	3.717552	3.763428	3.794316	3.872618	3.952487
1980	3.111942	3.369826	3.437466	3.506422	3.576719	3.619551	3.648381	3.721435	3.795906
1981	3.006708	3.248025	3.311226	3.375617	3.441221	3.481174	3.508059	3.576154	3.645528
1982	2.905031	3.130627	3.189621	3.249692	3.310856	3.348088	3.373133	3.436544	3.501108
1983	2.806794	3.017471	3.072483	3.128464	3.185429	3.220089	3.243398	3.302385	3.362408
1984	2.711878	2.908406	2.959647	3.011758	3.064755	3.096984	3.118651	3.173463	3.229204
1985	2.620172	2.803283	2.850954	2.899406	2.948652	2.978585	2.998703	3.049574	3.101276
1986	2.531567	2.701960	2.746253	2.791245	2.836947	2.864713	2.883369	2.930521	2.978416
1987	2.445959	2.604298	2.645397	2.687119	2.729474	2.755194	2.772470	2.816117	2.860424
1988	2.363245	2.510167	2.548245	2.586878	2.626072	2.649862	2.665836	2.706178	2.747106
1989	2.283328	2.419438	2.454661	2.490376	2.526588	2.548557	2.563304	2.600532	2.638277
1990	2.206114	2.331989	2.364514	2.397474	2.430872	2.451124	2.464716	2.499009	2.533759
1991	2.131512	2.247700	2.277678	2.308037	2.338783	2.357417	2.369919	2.401450	2.433382
1992	2.059431	2.166458	2.194030	2.221937	2.250182	2.267292	2.278768	2.307700	2.336982
1993	1.989789	2.088152	2.113455	2.139049	2.164937	2.180613	2.191123	2.217610	2.244400
1994	1.922501	2.012677	2.035839	2.059253	2.082922	2.097247	2.106849	2.131036	2.155486
1995	1.857489	1.939929	1.961073	1.982434	2.004014	2.017069	2.025817	2.047843	2.070095
1996	1.794676	1.869811	1.889053	1.908480	1.928095	1.939956	1.947908	1.967897	1.988086
1997	1.733986	1.802228	1.819677	1.837285	1.855053	1.865790	1.872981	1.891072	1.909327
1998	1.675349	1.737087	1.752850	1.768746	1.784777	1.794461	1.800944	1.817246	1.833687
1999	1.618695	1.674301	1.688477	1.702764	1.717164	1.725858	1.731676	1.746303	1.761044
2000	1.563956	1.613784	1.626468	1.639244	1.652112	1.659878	1.665074	1.678112	1.691279
2001	1.511069	1.555454	1.566736	1.578092	1.589524	1.596420	1.601032	1.612616	1.624277
2002	1.459970	1.499233	1.509198	1.519223	1.529308	1.535388	1.539454	1.549661	1.559930
2003	1.410599	1.445044	1.453773	1.462549	1.471373	1.476690	1.480244	1.489164	1.498132
2004	1.362897	1.392813	1.400383	1.407989	1.415632	1.420235	1.423312	1.431029	1.438782
2005	1.316809	1.342471	1.348954	1.355465	1.362003	1.365939	1.368569	1.375163	1.381784
2006	1.272279	1.293948	1.299414	1.304900	1.310406	1.313719	1.315932	1.321478	1.327043
2007	1.229255	1.247179	1.251693	1.256221	1.260763	1.263495	1.265319	1.269888	1.274471
2008	1.187686	1.202100	1.205725	1.209359	1.213001	1.215191	1.216653	1.220313	1.223982
2009	1.147523	1.158650	1.161445	1.164244	1.167049	1.168734	1.169859	1.172673	1.175493
2010	1.108718	1.116771	1.118791	1.120813	1.122837	1.124053	1.124864	1.126893	1.128925
2011	1.071225	1.076406	1.077704	1.079002	1.080300	1.081080	1.081600	1.082900	1.084202
2012	1.035000	1.037500	1.038125	1.038750	1.039375	1.039750	1.040000	1.040625	1.041250
2013	1.000000	1.000000	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**

<b>7.00%</b>	<b>7.50%</b>	<b>7.625%</b>	<b>7.75%</b>	<b>7.875%</b>	<b>7.95%</b>	<b>8.00%</b>	<b>8.125%</b>	<b>8.25%</b>
0.002917	0.003125	0.003177	0.003229	0.003281	0.003313	0.003333	0.003385	0.003438

**Cumulative Interest Factors for Buybacks/Make-Ups - ACTUARIAL INTEREST**

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)

<b>Year</b>	<b>7.00%</b>	<b>7.50%</b>	<b>7.625%</b>	<b>7.75%</b>	<b>7.875%</b>	<b>7.95%</b>	<b>8.00%</b>	<b>8.13%</b>	<b>8.50%</b>
1966	24.045707	29.936279	31.616860	33.389668	35.259651	36.430438	37.232012	39.312228	46.259155
1967	22.472623	27.847702	29.376873	30.988091	32.685656	33.747511	34.474085	36.358130	42.635166
1968	21.002452	25.904839	27.295585	28.759249	30.299565	31.262169	31.920449	33.626016	39.295084
1969	19.628460	24.097524	25.361751	26.690719	28.087662	28.959860	29.555972	31.099206	36.216667
1970	18.344355	22.416302	23.564926	24.770969	26.037230	26.827105	27.366640	28.762271	33.379417
1971	17.144257	20.852374	21.895401	22.989298	24.136482	24.851417	25.339482	26.600945	30.764439
1972	16.022670	19.397557	20.344159	21.335775	22.374491	23.021229	23.462483	24.602030	28.354322
1973	14.974458	18.044239	18.902819	19.801184	20.741127	21.325826	21.724521	22.753322	26.133016
1974	13.994820	16.785339	17.563595	18.376969	19.227001	19.755281	20.115298	21.043535	24.085729
1975	13.079271	15.614268	16.319252	17.055191	17.823407	18.300400	18.625276	19.462229	22.198828
1976	12.223618	14.524901	15.163068	15.828484	16.522278	16.952663	17.245626	17.999749	20.459750
1977	11.423942	13.511536	14.088797	14.690008	15.316132	15.704181	15.968172	16.647167	18.856912
1978	10.676581	12.568870	13.090636	13.633418	14.198037	14.547643	14.785344	15.396224	17.379642
1979	9.978114	11.691972	12.163193	12.652824	13.161564	13.476279	13.690134	14.239282	16.018104
1980	9.325340	10.876253	11.301457	11.742760	12.200754	12.483815	12.676050	13.169278	14.763229
1981	8.715271	10.117445	10.500773	10.898154	11.310085	11.564442	11.737083	12.179679	13.606663
1982	8.145113	9.411577	9.756816	10.114296	10.484436	10.712777	10.867669	11.264443	12.540703
1983	7.612255	8.754955	9.065566	9.386817	9.719060	9.923832	10.062657	10.417982	11.558252
1984	7.114257	8.144144	8.423290	8.711663	9.009557	9.192989	9.317275	9.635128	10.652766
1985	6.648838	7.575948	7.826518	8.085070	8.351849	8.515970	8.627106	8.911101	9.818218
1986	6.213868	7.047394	7.272026	7.503546	7.742155	7.888809	7.988061	8.241481	9.049049
1987	5.807353	6.555715	6.756819	6.963847	7.176968	7.307836	7.396353	7.622179	8.340137
1988	5.427433	6.098340	6.278113	6.462967	6.653041	6.769649	6.848475	7.049414	7.686762
1989	5.072367	5.672874	5.833322	5.998114	6.167362	6.271097	6.341181	6.519689	7.084574
1990	4.740530	5.277092	5.420044	5.566695	5.717137	5.809261	5.871464	6.029770	6.529561
1991	4.430402	4.908923	5.036045	5.166306	5.299779	5.381437	5.436540	5.576666	6.018028
1992	4.140562	4.566440	4.679252	4.794716	4.912889	4.985120	5.033834	5.157610	5.546570
1993	3.869684	4.247851	4.347737	4.449852	4.554243	4.617989	4.660957	4.770044	5.112046
1994	3.616528	3.951489	4.039709	4.129793	4.221778	4.277897	4.315701	4.411602	4.711563
1995	3.379932	3.675804	3.753505	3.832755	3.913583	3.962850	3.996019	4.080094	4.342455
1996	3.158815	3.419353	3.487577	3.557081	3.627887	3.671005	3.700018	3.773497	4.002262
1997	2.952164	3.180793	3.240490	3.301235	3.363047	3.400653	3.425943	3.489940	3.688721
1998	2.759032	2.958877	3.010908	3.063791	3.117541	3.150211	3.172169	3.227690	3.399743
1999	2.578534	2.752444	2.797592	2.843426	2.889957	2.918213	2.937194	2.985147	3.133404
2000	2.409845	2.560413	2.599388	2.638910	2.678986	2.703301	2.719624	2.760829	2.887930
2001	2.252192	2.381780	2.415227	2.449105	2.483417	2.504216	2.518170	2.553368	2.661686
2002	2.104852	2.215609	2.244113	2.272951	2.302125	2.319792	2.331639	2.361497	2.453167
2003	1.967151	2.061032	2.085123	2.109467	2.134067	2.148951	2.158925	2.184043	2.260983
2004	1.838459	1.917239	1.937396	1.957742	1.978278	1.990691	1.999005	2.019924	2.083856
2005	1.718186	1.783478	1.800136	1.816930	1.833861	1.844086	1.850930	1.868138	1.920604
2006	1.605781	1.659049	1.672600	1.686246	1.699987	1.708278	1.713824	1.727758	1.770142
2007	1.500730	1.543302	1.554100	1.564962	1.575886	1.582471	1.586874	1.597926	1.631468
2008	1.402552	1.435629	1.443995	1.452401	1.460845	1.465930	1.469328	1.477851	1.503657
2009	1.310796	1.335469	1.341691	1.347936	1.354201	1.357971	1.360489	1.366798	1.385859
2010	1.225043	1.242297	1.246636	1.250984	1.255343	1.257963	1.259712	1.264091	1.277289
2011	1.144900	1.155625	1.158314	1.161006	1.163702	1.165320	1.166400	1.169102	1.177225
2012	1.070000	1.075000	1.076250	1.077500	1.078750	1.079500	1.080000	1.081250	1.085000
2013	1.000000	1.000000	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**

<b>7.00%</b>	<b>7.50%</b>	<b>7.625%</b>	<b>7.75%</b>	<b>7.875%</b>	<b>7.95%</b>	<b>8.00%</b>	<b>8.13%</b>	<b>8.50%</b>
0.005833	0.00625	0.006354	0.006458	0.006563	0.006625	0.006667	0.006771	0.007083