

REPAYMENT WORKSHEET FOR BUYBACKS IN 2025 - BUYBACK INTEREST

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

Name: _____

Social Security Number: _____

Date of Refund: ____/____/____
 Date of Repayment: ____/____/____

Investment Return Assumption: _____%

Amount of Refund: \$ _____

Periods of Service Covered by Refund:

Amount Of Service:

From: ____/____/____
 To: ____/____/____
 From: ____/____/____
 To: ____/____/____

____ yrs. ____ mos.
 ____ yrs. ____ mos.

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

	<u>7.25%</u>	<u>7.35%</u>	<u>7.40%</u>	<u>7.50%</u>	<u>7.60%</u>	<u>7.65%</u>	<u>7.75%</u>	<u>7.875%</u>
Monthly Interest Factor:	0.003021	0.003063	0.003083	0.003125	0.003167	0.003188	0.003229	0.003281

13 - _____ = _____ x _____ = _____
(Month of Refund) (Monthly Factor)

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

Interest rate:	<u>7.25%</u>	<u>7.35%</u>	<u>7.40%</u>	<u>7.50%</u>	<u>7.60%</u>	<u>7.65%</u>	<u>7.75%</u>	<u>7.875%</u>
January:	0.003021	0.003063	0.003083	0.003125	0.003167	0.003188	0.003229	0.003281
February:	0.006042	0.006125	0.006167	0.006250	0.006333	0.006375	0.006458	0.006563
March:	0.009063	0.009188	0.009250	0.009375	0.009500	0.009563	0.009688	0.009844
April:	0.012083	0.012250	0.012333	0.012500	0.012667	0.012750	0.012917	0.013125
May:	0.015104	0.015313	0.015417	0.015625	0.015833	0.015938	0.016146	0.016406
June:	0.018125	0.018375	0.018500	0.018750	0.019000	0.019125	0.019375	0.019688
July:	0.021146	0.021438	0.021583	0.021875	0.022167	0.022313	0.022604	0.022969
August:	0.024167	0.024500	0.024667	0.025000	0.025333	0.025500	0.025833	0.026250
September:	0.027188	0.027563	0.027750	0.028125	0.028500	0.028688	0.029063	0.029531
October:	0.030208	0.030625	0.030833	0.031250	0.031667	0.031875	0.032292	0.032813
November:	0.033229	0.033688	0.033917	0.034375	0.034833	0.035063	0.035521	0.036094
December:	0.036250	0.036750	0.037000	0.037500	0.038000	0.038250	0.038750	0.039375

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 12/31/2024: _____ (5)
 Balance as of 12/31/2024 (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 2025 - ACTUARIAL INTEREST

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

Name: _____

Social Security Number: _____

Date of Refund: ____/____/____
 Date of Repayment: ____/____/____

Investment Return
 Assumption: _____%

Amount of Refund: \$ _____

Periods of Service Covered by Refund:

Amount Of Service:

From: ____/____/____
 To: ____/____/____
 From: ____/____/____
 To: ____/____/____

_____ yrs. _____ mos.
 _____ yrs. _____ mos.

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

	<u>5.50%</u>	<u>5.75%</u>	<u>6.00%</u>	<u>6.25%</u>	<u>6.50%</u>	<u>6.75%</u>	<u>6.80%</u>	<u>6.85%</u>
Monthly Interest Factor:	0.004583	0.004792	0.005000	0.005208	0.005417	0.005625	0.005667	0.005708

13 - _____ = _____ x _____ = _____
(Month of Refund) (Monthly Factor)

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

Interest rate:	<u>5.50%</u>	<u>5.75%</u>	<u>6.00%</u>	<u>6.25%</u>	<u>6.50%</u>	<u>6.75%</u>	<u>6.80%</u>	<u>6.85%</u>
<i>January:</i>	0.004583	0.004792	0.005000	0.005208	0.005417	0.005625	0.005667	0.005708
<i>February:</i>	0.009167	0.009583	0.010000	0.010417	0.010833	0.011250	0.011333	0.011417
<i>March:</i>	0.013750	0.014375	0.015000	0.015625	0.016250	0.016875	0.017000	0.017125
<i>April:</i>	0.018333	0.019167	0.020000	0.020833	0.021667	0.022500	0.022667	0.022833
<i>May:</i>	0.022917	0.023958	0.025000	0.026042	0.027083	0.028125	0.028333	0.028542
<i>June:</i>	0.027500	0.028750	0.030000	0.031250	0.032500	0.033750	0.034000	0.034250
<i>July:</i>	0.032083	0.033542	0.035000	0.036458	0.037917	0.039375	0.039667	0.039958
<i>August:</i>	0.036667	0.038333	0.040000	0.041667	0.043333	0.045000	0.045333	0.045667
<i>September:</i>	0.041250	0.043125	0.045000	0.046875	0.048750	0.050625	0.051000	0.051375
<i>October:</i>	0.045833	0.047917	0.050000	0.052083	0.054167	0.056250	0.056667	0.057083
<i>November:</i>	0.050417	0.052708	0.055000	0.057292	0.059583	0.061875	0.062333	0.062792
<i>December:</i>	0.055000	0.057500	0.060000	0.062500	0.065000	0.067500	0.068000	0.068500

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 12/31/2024: _____ (5)
 Balance as of 12/31/2024 (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 2025 - ACTUARIAL INTEREST

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

Name: _____

Social Security Number: _____

Date of Refund: ____ / ____ / ____

Date of Repayment: ____ / ____ / ____

Investment Return 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>7.25%</u>	<u>7.35%</u>	<u>7.40%</u>	<u>7.50%</u>	<u>7.60%</u>	<u>7.65%</u>	<u>7.75%</u>	<u>7.875%</u>
Monthly Interest Factor:	0.006042	0.006125	0.006167	0.006250	0.006333	0.006375	0.006458	0.006563

13 - _____ = _____ x _____ = _____
(Month of Refund) (Monthly Factor)

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

Interest rate:	<u>7.25%</u>	<u>7.35%</u>	<u>7.40%</u>	<u>7.50%</u>	<u>7.60%</u>	<u>7.65%</u>	<u>7.75%</u>	<u>7.875%</u>
<i>January:</i>	0.006042	0.006125	0.006167	0.006250	0.006333	0.006375	0.006458	0.006563
<i>February:</i>	0.012083	0.012250	0.012333	0.012500	0.012667	0.012750	0.012917	0.013125
<i>March:</i>	0.018125	0.018375	0.018500	0.018750	0.019000	0.019125	0.019375	0.019688
<i>April:</i>	0.024167	0.024500	0.024667	0.025000	0.025333	0.025500	0.025833	0.026250
<i>May:</i>	0.030208	0.030625	0.030833	0.031250	0.031667	0.031875	0.032292	0.032813
<i>June:</i>	0.036250	0.036750	0.037000	0.037500	0.038000	0.038250	0.038750	0.039375
<i>July:</i>	0.042292	0.042875	0.043167	0.043750	0.044333	0.044625	0.045208	0.045938
<i>August:</i>	0.048333	0.049000	0.049333	0.050000	0.050667	0.051000	0.051667	0.052500
<i>September:</i>	0.054375	0.055125	0.055500	0.056250	0.057000	0.057375	0.058125	0.059063
<i>October:</i>	0.060417	0.061250	0.061667	0.062500	0.063333	0.063750	0.064583	0.065625
<i>November:</i>	0.066458	0.067375	0.067833	0.068750	0.069667	0.070125	0.071042	0.072188
<i>December:</i>	0.072500	0.073500	0.074000	0.075000	0.076000	0.076500	0.077500	0.078750

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 12/31/2024: _____ (5)

Balance as of 12/31/2024 (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 2025 - ACTUARIAL INTEREST

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

Name: _____

Social Security Number: _____

Date of Refund: ____ / ____ / ____
 Date of Repayment: ____ / ____ / ____

Investment Return
 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>6.85%</u>	<u>6.90%</u>	<u>7.00%</u>	<u>7.10%</u>	<u>7.125%</u>	<u>7.15%</u>	<u>7.25%</u>	<u>7.35%</u>
Monthly Interest Factor:	0.005708	0.005750	0.005833	0.005917	0.005938	0.005958	0.006042	0.006125

13 - _____ = _____ x _____ = _____
(Month of Refund) (Monthly Factor)

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

Interest rate:	<u>6.85%</u>	<u>6.90%</u>	<u>7.00%</u>	<u>7.10%</u>	<u>7.125%</u>	<u>7.15%</u>	<u>7.25%</u>	<u>7.35%</u>
<i>January:</i>	0.005708	0.005750	0.005833	0.005917	0.005938	0.005958	0.006042	0.006125
<i>February:</i>	0.011417	0.011500	0.011667	0.011833	0.011875	0.011917	0.012083	0.012250
<i>March:</i>	0.017125	0.017250	0.017500	0.017750	0.017813	0.017875	0.018125	0.018375
<i>April:</i>	0.022833	0.023000	0.023333	0.023667	0.023750	0.023833	0.024167	0.024500
<i>May:</i>	0.028542	0.028750	0.029167	0.029583	0.029688	0.029792	0.030208	0.030625
<i>June:</i>	0.034250	0.034500	0.035000	0.035500	0.035625	0.035750	0.036250	0.036750
<i>July:</i>	0.039958	0.040250	0.040833	0.041417	0.041563	0.041708	0.042292	0.042875
<i>August:</i>	0.045667	0.046000	0.046667	0.047333	0.047500	0.047667	0.048333	0.049000
<i>September:</i>	0.051375	0.051750	0.052500	0.053250	0.053438	0.053625	0.054375	0.055125
<i>October:</i>	0.057083	0.057500	0.058333	0.059167	0.059375	0.059583	0.060417	0.061250
<i>November:</i>	0.062792	0.063250	0.064167	0.065083	0.065313	0.065542	0.066458	0.067375
<i>December:</i>	0.068500	0.069000	0.070000	0.071000	0.071250	0.071500	0.072500	0.073500

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 12/31/2024: _____ (5)

Balance as of 12/31/2024 (4) x (5): _____ (6)

Current Year

Interest Factor to End of Month: _____ (7)

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

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

2025 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
1977					
1978					
1979					
1980					
1981					
1982					
1983					
1984					
1985					
1986					
1987					
1988					
1989					
1990					
1991					
1992					
1993					
1994					
1995					
1996					
1997					
1998					
1999					
2000					
2001					
2002					
2003					
2004					
2005					
2006					
2007					
2008					
2009					
2010					
2011					
2012					
2013					
2014					
2015					
2016					
2017					
2018					
2019					
2020					
2021					
2022					
2023					
2024					

Subtotal on 12/31/2024 _____ (A)

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

Grand Total ____ /31/2025 (A)+(D) _____

2025 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)(g½), 4(1)(l), 4(1)(l½), 4(1)(l¾), 4(1)(n), 4(1)(n½), 4(1)(p), 4(1)(r), 4(1)(s) and 4(2)(c)

<u>Year</u>	<u>5.50%</u>	<u>5.75%</u>	<u>6.00%</u>	<u>6.25%</u>	<u>6.50%</u>	<u>6.75%</u>	<u>6.80%</u>	<u>6.85%</u>	<u>6.90%</u>	<u>7.00%</u>	<u>7.10%</u>	<u>7.125%</u>
1977	3.578871	3.789334	4.011895	4.247234	4.496608	4.759152	4.813548	4.868553	4.924173	5.037284	5.152937	5.182254
1978	3.483086	3.683435	3.895044	4.118530	4.354545	4.603774	4.655269	4.707327	4.759954	4.866941	4.976279	5.003987
1979	3.389865	3.580496	3.781596	3.993726	4.217477	4.453470	4.502194	4.551440	4.601212	4.702359	4.805678	4.831852
1980	3.299138	3.480433	3.671452	3.872704	4.084723	4.308072	4.354153	4.400716	4.447764	4.543342	4.640925	4.665639
1981	3.210840	3.383167	3.564517	3.755349	3.956149	4.167422	4.210980	4.254982	4.299434	4.389702	4.481820	4.505143
1982	3.124905	3.288619	3.460696	3.641551	3.831621	4.031363	4.072514	4.114075	4.156050	4.241258	4.328170	4.350169
1983	3.041271	3.196714	3.359899	3.531201	3.711013	3.899747	3.938602	3.977835	4.017448	4.097834	4.179788	4.200525
1984	2.959874	3.107377	3.262038	3.424195	3.594201	3.772428	3.809093	3.846105	3.883469	3.959260	4.036492	4.056029
1985	2.880656	3.020536	3.167027	3.320431	3.481067	3.649265	3.683842	3.718739	3.753957	3.825372	3.898109	3.916503
1986	2.803558	2.936123	3.074783	3.219812	3.371493	3.530123	3.562710	3.595590	3.628765	3.696011	3.764471	3.781778
1987	2.728524	2.854068	2.985227	3.122242	3.265369	3.414871	3.445561	3.476519	3.507747	3.571025	3.635414	3.651686
1988	2.655498	2.774307	2.898278	3.027629	3.162585	3.303382	3.332264	3.361391	3.390766	3.450266	3.510781	3.526070
1989	2.584426	2.696775	2.813862	2.935882	3.063036	3.195533	3.222692	3.250076	3.277686	3.333590	3.390421	3.404775
1990	2.515256	2.621409	2.731905	2.846916	2.966621	3.091205	3.116724	3.142447	3.168377	3.220860	3.274187	3.287652
1991	2.447938	2.548150	2.652335	2.760646	2.873241	2.990283	3.014240	3.038383	3.062713	3.111942	3.161938	3.174559
1992	2.382421	2.476938	2.575083	2.676990	2.782800	2.892656	2.915125	2.937764	2.960573	3.006708	3.053538	3.065355
1993	2.318658	2.407716	2.500080	2.595869	2.695205	2.798216	2.819270	2.840478	2.861840	2.905031	2.948854	2.959909
1994	2.256602	2.340429	2.427262	2.517207	2.610368	2.706859	2.726567	2.746413	2.766399	2.806794	2.847758	2.858089
1995	2.196206	2.275022	2.356566	2.440928	2.528202	2.618485	2.636912	2.655464	2.674141	2.711878	2.750129	2.759772
1996	2.137427	2.211443	2.287928	2.366960	2.448622	2.532997	2.550205	2.567526	2.584960	2.620172	2.655846	2.664837
1997	2.080221	2.149641	2.221289	2.295234	2.371546	2.450299	2.466349	2.482500	2.498753	2.531567	2.564796	2.573168
1998	2.024546	2.089566	2.156591	2.225681	2.296897	2.370301	2.385251	2.400290	2.415421	2.445959	2.476867	2.484653
1999	1.970361	2.031170	2.093778	2.158237	2.224598	2.292916	2.306819	2.320803	2.334868	2.363245	2.391953	2.399182
2000	1.917626	1.974406	2.032794	2.092835	2.154574	2.218056	2.230966	2.243948	2.257002	2.283328	2.309949	2.316651
2001	1.866303	1.919228	1.973587	2.029416	2.086755	2.145641	2.157607	2.169638	2.181732	2.206114	2.230758	2.236959
2002	1.816353	1.865592	1.916103	1.967919	2.021070	2.075590	2.086661	2.097788	2.108972	2.131512	2.154281	2.160009
2003	1.767740	1.813455	1.860295	1.908285	1.957453	2.007826	2.018047	2.028318	2.038639	2.059431	2.080425	2.085706
2004	1.720428	1.762775	1.806111	1.850458	1.895838	1.942274	1.951690	1.961149	1.970652	1.989789	2.009102	2.013958
2005	1.674383	1.713512	1.753506	1.794384	1.836163	1.878862	1.887514	1.896204	1.904932	1.922501	1.940224	1.944679
2006	1.629570	1.665625	1.702433	1.740008	1.778366	1.817521	1.825449	1.833410	1.841403	1.857489	1.873708	1.877783
2007	1.585956	1.619077	1.652848	1.687281	1.722388	1.758182	1.765425	1.772695	1.779993	1.794676	1.809472	1.813188
2008	1.543509	1.573829	1.604706	1.636151	1.668173	1.700781	1.707374	1.713991	1.720632	1.733986	1.747438	1.750816
2009	1.502199	1.529846	1.557967	1.586571	1.615663	1.645254	1.651232	1.657231	1.663250	1.675349	1.687530	1.690588
2010	1.461994	1.487092	1.512590	1.538493	1.564807	1.591539	1.596936	1.602350	1.607781	1.618695	1.629677	1.632433
2011	1.422865	1.445533	1.468534	1.491872	1.515552	1.539578	1.544426	1.549287	1.554163	1.563956	1.573807	1.576278
2012	1.384784	1.405135	1.425761	1.446664	1.467847	1.489314	1.493642	1.497981	1.502332	1.511069	1.519852	1.522055
2013	1.347721	1.365867	1.384234	1.402825	1.421643	1.440691	1.444528	1.448374	1.452230	1.459970	1.467747	1.469697
2014	1.311651	1.327695	1.343916	1.360315	1.376894	1.393655	1.397029	1.400410	1.403799	1.410599	1.417428	1.419140
2015	1.276546	1.290591	1.304773	1.319094	1.333554	1.348155	1.351092	1.354035	1.356983	1.362897	1.368834	1.370322
2016	1.242381	1.254523	1.266770	1.279121	1.291578	1.304140	1.306665	1.309195	1.311729	1.316809	1.321907	1.323184
2017	1.209129	1.219464	1.229874	1.240360	1.250923	1.261562	1.263699	1.265840	1.267983	1.272279	1.276588	1.277667
2018	1.176768	1.185384	1.194052	1.202773	1.211547	1.220375	1.222146	1.223920	1.225697	1.229255	1.232823	1.233716
2019	1.145273	1.152257	1.159274	1.166326	1.173411	1.180532	1.181960	1.183389	1.184820	1.187686	1.190558	1.191277
2020	1.114621	1.120055	1.125509	1.130982	1.136476	1.141989	1.143095	1.144200	1.145307	1.147523	1.149742	1.150297
2021	1.084790	1.088753	1.092727	1.096710	1.100703	1.104706	1.105507	1.106309	1.107112	1.108718	1.110325	1.110728
2022	1.055756	1.058327	1.060900	1.063477	1.066056	1.068639	1.069156	1.069673	1.070190	1.071225	1.072260	1.072519
2023	1.027500	1.028750	1.030000	1.031250	1.032500	1.033750	1.034000	1.034250	1.034500	1.035000	1.035500	1.035625
2024	1.000000	1.000000	1.000000	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

<u>5.50%</u>	<u>5.75%</u>	<u>6.00%</u>	<u>6.25%</u>	<u>6.50%</u>	<u>6.75%</u>	<u>6.80%</u>	<u>6.85%</u>	<u>6.90%</u>	<u>7.00%</u>	<u>7.10%</u>	<u>7.125%</u>
0.002292	0.002396	0.002500	0.002604	0.002708	0.002813	0.002833	0.002854	0.002875	0.002917	0.002958	0.002969

2025 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)(g½), 4(1)(l), 4(1)(l½), 4(1)(l¾), 4(1)(n), 4(1)(n½), 4(1)(p), 4(1)(r), 4(1)(s) and 4(2)(c)

<u>Year</u>	<u>7.00%</u>	<u>7.10%</u>	<u>7.125%</u>	<u>7.15%</u>	<u>7.25%</u>	<u>7.35%</u>	<u>7.40%</u>	<u>7.50%</u>	<u>7.60%</u>	<u>7.65%</u>	<u>7.75%</u>	<u>7.875%</u>
1977	5.037284	5.152937	5.182254	5.211734	5.331305	5.453560	5.515712	5.642102	5.771326	5.837020	5.970610	6.141812
1978	4.866941	4.976279	5.003987	5.031846	5.144806	5.260246	5.318912	5.438171	5.560044	5.621979	5.747880	5.909140
1979	4.702359	4.805678	4.831852	4.858166	4.964831	5.073784	5.129134	5.241610	5.356498	5.414861	5.533458	5.685282
1980	4.543342	4.640925	4.665639	4.690482	4.791152	4.893932	4.946127	5.052155	5.160402	5.215373	5.327036	5.469904
1981	4.389702	4.481820	4.505143	4.528585	4.623548	4.720455	4.769650	4.869547	4.971486	5.023234	5.128314	5.262686
1982	4.241258	4.328170	4.350169	4.372276	4.461808	4.553128	4.599470	4.693539	4.789485	4.838174	4.937005	5.063318
1983	4.097834	4.179788	4.200525	4.221362	4.305725	4.391732	4.435361	4.523893	4.614148	4.659931	4.752832	4.871502
1984	3.959260	4.036492	4.056029	4.075657	4.155103	4.236057	4.277108	4.360379	4.445229	4.488256	4.575531	4.686954
1985	3.825372	3.898109	3.916503	3.934982	4.009749	4.085900	4.124502	4.202775	4.282494	4.322905	4.404843	4.509396
1986	3.696011	3.764471	3.781778	3.799162	3.869480	3.941066	3.977340	4.050867	4.125717	4.163645	4.240523	4.338565
1987	3.571025	3.635414	3.651686	3.668030	3.734119	3.801366	3.835429	3.904450	3.974679	4.010253	4.082332	4.174206
1988	3.450266	3.510781	3.526070	3.541424	3.603492	3.666617	3.698582	3.763326	3.829171	3.862512	3.930043	4.016073
1989	3.333590	3.390421	3.404775	3.419188	3.477435	3.536646	3.566617	3.627302	3.688989	3.720214	3.783435	3.863931
1990	3.220860	3.274187	3.287652	3.301171	3.355788	3.411281	3.439361	3.496194	3.553939	3.583158	3.642296	3.717552
1991	3.111942	3.161938	3.174559	3.187228	3.238396	3.290360	3.316645	3.369826	3.423834	3.451151	3.506422	3.576719
1992	3.006708	3.053538	3.065355	3.077217	3.125111	3.173726	3.198307	3.248025	3.298491	3.324008	3.375617	3.441221
1993	2.905031	2.948854	2.959909	2.971004	3.015788	3.061226	3.084192	3.130627	3.177737	3.201549	3.249692	3.310856
1994	2.806794	2.847758	2.858089	2.868456	2.910290	2.952714	2.974149	3.017471	3.061404	3.083601	3.128464	3.185429
1995	2.711878	2.750129	2.759772	2.769449	2.808483	2.848048	2.868032	2.908406	2.949329	2.969999	3.011758	3.064755
1996	2.620172	2.655846	2.664837	2.673858	2.710237	2.747092	2.765701	2.803283	2.841358	2.860581	2.899406	2.948652
1997	2.531567	2.564796	2.573168	2.581567	2.615427	2.649715	2.667021	2.701960	2.737339	2.755195	2.791245	2.836947
1998	2.445959	2.476867	2.484653	2.492462	2.523935	2.555790	2.571862	2.604298	2.637128	2.653692	2.687119	2.729474
1999	2.363245	2.391953	2.399182	2.406432	2.435643	2.465194	2.480098	2.510167	2.540586	2.555927	2.586878	2.626072
2000	2.283328	2.309949	2.316651	2.323371	2.350439	2.377809	2.391609	2.419438	2.447578	2.461765	2.490376	2.526588
2001	2.206114	2.230758	2.236959	2.243178	2.268216	2.293523	2.306277	2.331989	2.357975	2.371071	2.397474	2.430872
2002	2.131512	2.154281	2.160009	2.165752	2.188870	2.212223	2.223989	2.247700	2.271652	2.283719	2.308037	2.338783
2003	2.059431	2.080425	2.085706	2.090999	2.112299	2.133806	2.144637	2.166458	2.188489	2.199585	2.221937	2.250182
2004	1.989789	2.009102	2.013958	2.018826	2.038407	2.058168	2.068117	2.088152	2.108371	2.118550	2.139049	2.164937
2005	1.922501	1.940224	1.944679	1.949144	1.967099	1.985212	1.994327	2.012677	2.031186	2.040501	2.059253	2.082922
2006	1.857489	1.873708	1.877783	1.881867	1.898287	1.914841	1.923170	1.939929	1.956827	1.965327	1.982434	2.004014
2007	1.794676	1.809472	1.813188	1.816913	1.831881	1.846965	1.854551	1.869811	1.885189	1.892923	1.908480	1.928095
2008	1.733986	1.747438	1.750816	1.754200	1.767798	1.781495	1.788381	1.802228	1.816175	1.823186	1.837285	1.855053
2009	1.675349	1.687530	1.690588	1.693652	1.705957	1.718346	1.724572	1.737087	1.749687	1.756019	1.768746	1.784777
2010	1.618695	1.629677	1.632433	1.635194	1.646280	1.657435	1.663040	1.674301	1.685633	1.691325	1.702764	1.717164
2011	1.563956	1.573807	1.576278	1.578753	1.588690	1.598684	1.603703	1.613784	1.623924	1.629016	1.639244	1.652112
2012	1.511069	1.519852	1.522055	1.524261	1.533114	1.542015	1.546483	1.555454	1.564474	1.569001	1.578092	1.589524
2013	1.459970	1.467747	1.469697	1.471649	1.479483	1.487354	1.491304	1.499233	1.507200	1.511198	1.519223	1.529308
2014	1.410599	1.417428	1.419140	1.420854	1.427728	1.434632	1.438095	1.445044	1.452023	1.455524	1.462549	1.471373
2015	1.362897	1.368834	1.370322	1.371812	1.377783	1.383778	1.386784	1.392813	1.398866	1.401901	1.407989	1.415632
2016	1.316809	1.321907	1.323184	1.324462	1.329586	1.334727	1.337304	1.342471	1.347655	1.350254	1.355465	1.362003
2017	1.272279	1.276588	1.277667	1.278747	1.283074	1.287414	1.289589	1.293948	1.298319	1.300510	1.304900	1.310406
2018	1.229255	1.232823	1.233716	1.234610	1.238190	1.241779	1.243577	1.247179	1.250789	1.252598	1.256221	1.260763
2019	1.187686	1.190558	1.191277	1.191996	1.194876	1.197761	1.199206	1.202100	1.204999	1.206451	1.209359	1.213001
2020	1.147523	1.149742	1.150297	1.150853	1.153077	1.155304	1.156418	1.158650	1.160886	1.162004	1.164244	1.167049
2021	1.108718	1.110325	1.110728	1.111130	1.112740	1.114351	1.115158	1.116771	1.118387	1.119195	1.120813	1.122837
2022	1.071225	1.072260	1.072519	1.072778	1.073814	1.074851	1.075369	1.076406	1.077444	1.077963	1.079002	1.080300
2023	1.035000	1.035500	1.035625	1.035750	1.036250	1.036750	1.037000	1.037000	1.038000	1.038250	1.038750	1.039375
2024	1.000000	1.000000	1.000000	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

<u>7.00%</u>	<u>7.10%</u>	<u>7.125%</u>	<u>7.15%</u>	<u>7.25%</u>	<u>7.35%</u>	<u>7.40%</u>	<u>7.50%</u>	<u>7.60%</u>	<u>7.65%</u>	<u>7.75%</u>	<u>7.875%</u>
0.002917	0.002958	0.002969	0.002979	0.003021	0.003063	0.003083	0.003125	0.003167	0.003188	0.003229	0.003281

2025 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)

<u>Year</u>	<u>5.50%</u>	<u>5.75%</u>	<u>6.00%</u>	<u>6.25%</u>	<u>6.50%</u>	<u>6.75%</u>	<u>6.80%</u>	<u>6.85%</u>	<u>6.90%</u>	<u>7.00%</u>	<u>7.10%</u>	<u>7.125%</u>
1977	12.384133	13.841325	15.465917	17.276673	19.294413	21.542224	22.021600	22.511412	23.011882	24.045707	25.124946	25.402078
1978	11.738515	13.088724	14.590487	16.260398	18.116820	20.180069	20.619476	21.068238	21.526550	22.472623	23.459333	23.712558
1979	11.126554	12.377044	13.764611	15.303904	17.011098	18.904046	19.306625	19.717584	20.137091	21.002452	21.904139	22.135410
1980	10.546497	11.704060	12.985482	14.403675	15.972862	17.708708	18.077365	18.453518	18.837316	19.628460	20.452044	20.663160
1981	9.996679	11.067669	12.250455	13.556400	14.997993	16.588954	16.926371	17.270489	17.621437	18.344355	19.096213	19.288831
1982	9.475525	10.465881	11.557033	12.758964	14.082622	15.540004	15.848662	16.163303	16.484038	17.144257	17.830264	18.005910
1983	8.981541	9.896814	10.902861	12.008437	13.223119	14.557380	14.839571	15.127097	15.420055	16.022670	16.648239	16.808317
1984	8.513309	9.358690	10.285718	11.302058	12.416075	13.636890	13.894730	14.157320	14.424747	14.974458	15.544574	15.690378
1985	8.069487	8.849825	9.703507	10.637231	11.658286	12.774605	13.010047	13.249715	13.493683	13.994820	14.514075	14.646794
1986	7.648803	8.368629	9.154252	10.011512	10.946747	11.966843	12.181692	12.400295	12.622716	13.079271	13.551891	13.672619
1987	7.250050	7.913597	8.636087	9.422600	10.278636	11.210157	11.406078	11.605330	11.807966	12.223618	12.653493	12.763239
1988	6.872085	7.483307	8.147252	8.868329	9.651301	10.501318	10.679849	10.861329	11.045805	11.423942	11.814652	11.914342
1989	6.513825	7.076413	7.686087	8.346663	9.062255	9.837300	9.999858	10.165024	10.332839	10.676581	11.031422	11.121906
1990	6.174242	6.691643	7.251025	7.855682	8.509159	9.215270	9.363163	9.513359	9.665893	9.978114	10.300113	10.382176
1991	5.852362	6.327795	6.840590	7.393583	7.989821	8.632571	8.767007	8.903472	9.041995	9.325340	9.617286	9.691646
1992	5.547262	5.983731	6.453387	6.958667	7.502179	8.086718	8.208808	8.332683	8.458368	8.715271	8.979726	9.047044
1993	5.258069	5.658374	6.088101	6.549333	7.044300	7.575380	7.686150	7.798486	7.912411	8.145113	8.384431	8.445316
1994	4.983951	5.350708	5.743491	6.164079	6.614366	7.096374	7.196769	7.298537	7.401695	7.612255	7.828600	7.883608
1995	4.724124	5.059772	5.418388	5.801486	6.210672	6.647657	6.738548	6.830638	6.923942	7.114257	7.309618	7.359261
1996	4.477843	4.784654	5.111687	5.460222	5.831617	6.227314	6.309502	6.392736	6.477028	6.648838	6.825040	6.869789
1997	4.244401	4.524495	4.822346	5.139032	5.475697	5.833549	5.907773	5.982906	6.058959	6.213868	6.372586	6.412872
1998	4.023129	4.278483	4.549383	4.836736	5.141500	5.464683	5.531623	5.599351	5.667876	5.807353	5.950127	5.986345
1999	3.813392	4.045846	4.291871	4.552222	4.827699	5.119141	5.179422	5.240385	5.302035	5.427433	5.555674	5.588186
2000	3.614590	3.825860	4.048935	4.284445	4.533051	4.795448	4.849646	4.904431	4.959809	5.072367	5.187371	5.216510
2001	3.426152	3.617834	3.819750	4.032418	4.256386	4.492223	4.540867	4.590015	4.639671	4.740530	4.843484	4.869554
2002	3.247537	3.421120	3.603537	3.795217	3.996606	4.208172	4.251748	4.295756	4.340198	4.430402	4.522394	4.545675
2003	3.078234	3.235101	3.399564	3.571969	3.752682	3.942081	3.981038	4.020361	4.060054	4.140562	4.222590	4.243337
2004	2.917757	3.059198	3.207135	3.361853	3.523645	3.692816	3.727564	3.762621	3.797993	3.869684	3.942661	3.961108
2005	2.765647	2.892858	3.025600	3.164097	3.308587	3.459312	3.490228	3.521405	3.552846	3.616528	3.681289	3.697651
2006	2.621466	2.735563	2.854339	2.977974	3.106654	3.240574	3.268004	3.295653	3.323523	3.379932	3.437245	3.451716
2007	2.484802	2.586821	2.692773	2.802799	2.917046	3.035666	3.059929	3.084373	3.109002	3.158815	3.209379	3.222138
2008	2.355263	2.446167	2.540352	2.637928	2.739011	2.843715	2.865102	2.886639	2.908327	2.952164	2.996619	3.007831
2009	2.232476	2.313160	2.396558	2.482756	2.571841	2.663902	2.682679	2.701580	2.720606	2.759032	2.797964	2.807776
2010	2.116091	2.187385	2.260904	2.336712	2.414874	2.495459	2.511872	2.528386	2.545001	2.578534	2.612478	2.621028
2011	2.005774	2.068449	2.132928	2.199258	2.267487	2.337666	2.351940	2.366295	2.380730	2.409845	2.439288	2.446701
2012	1.901207	1.955980	2.012196	2.069890	2.129096	2.189851	2.202191	2.214595	2.227063	2.252192	2.277580	2.283968
2013	1.802092	1.849627	1.898299	1.948132	1.999151	2.051383	2.061977	2.072621	2.083314	2.104852	2.126592	2.132059
2014	1.708144	1.749056	1.790848	1.833536	1.877137	1.921670	1.930690	1.939748	1.948844	1.967151	1.985613	1.990253
2015	1.619094	1.653954	1.689479	1.725681	1.762570	1.800159	1.807762	1.815393	1.823053	1.838459	1.853981	1.857879
2016	1.534687	1.564023	1.593848	1.624170	1.654996	1.686332	1.692661	1.699011	1.705382	1.718186	1.731075	1.734310
2017	1.454679	1.478981	1.503630	1.528631	1.553987	1.579702	1.584889	1.590090	1.595306	1.605781	1.616316	1.618959
2018	1.378843	1.398564	1.418519	1.438711	1.459142	1.479815	1.483978	1.488152	1.492335	1.500730	1.509165	1.511280
2019	1.306960	1.322519	1.338226	1.354081	1.370087	1.386243	1.389493	1.392748	1.396010	1.402552	1.409118	1.410763
2020	1.238825	1.250609	1.262477	1.274429	1.286466	1.298588	1.301023	1.303461	1.305903	1.310796	1.315703	1.316932
2021	1.174241	1.182609	1.191016	1.199463	1.207950	1.216476	1.218186	1.219898	1.221612	1.225043	1.228481	1.229341
2022	1.113025	1.118306	1.123600	1.128906	1.134225	1.139556	1.140624	1.141692	1.142761	1.144900	1.147041	1.147577
2023	1.055000	1.057500	1.060000	1.062500	1.065000	1.067500	1.068000	1.068500	1.069000	1.070000	1.071000	1.071250
2024	1.000000	1.000000	1.000000	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

<u>5.50%</u>	<u>5.75%</u>	<u>6.00%</u>	<u>6.25%</u>	<u>6.50%</u>	<u>6.75%</u>	<u>6.80%</u>	<u>6.85%</u>	<u>6.90%</u>	<u>7.00%</u>	<u>7.10%</u>	<u>7.125%</u>
0.004583	0.004792	0.005000	0.005208	0.005417	0.005625	0.005667	0.005708	0.005750	0.005833	0.005917	0.005938

2025 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)

<u>Year</u>	<u>7.00%</u>	<u>7.10%</u>	<u>7.125%</u>	<u>7.15%</u>	<u>7.25%</u>	<u>7.35%</u>	<u>7.40%</u>	<u>7.50%</u>	<u>7.60%</u>	<u>7.65%</u>	<u>7.75%</u>	<u>7.875%</u>
1977	24.045707	25.124946	25.402078	25.682201	26.833242	28.034724	28.655054	29.936279	31.273519	31.963888	33.389668	35.259651
1978	22.472623	23.459333	23.712558	23.968456	25.019339	26.115253	26.680683	27.847702	29.064609	29.692418	30.988091	32.685656
1979	21.002452	21.904139	22.135410	22.369068	23.328055	24.327204	24.842349	25.904839	27.011718	27.582367	28.759249	30.299565
1980	19.628460	20.452044	20.663160	20.876405	21.751101	22.661578	23.130679	24.097524	25.103827	25.622264	26.690719	28.087662
1981	18.344355	19.096213	19.288831	19.483346	20.280747	21.109993	21.536945	22.416302	23.330695	23.801453	24.770969	26.037230
1982	17.144257	17.830264	18.005910	18.183244	18.909787	19.664642	20.053021	20.852374	21.682802	22.110035	22.989298	24.136482
1983	16.022670	16.648239	16.808317	16.969896	17.631503	18.318251	18.671342	19.397557	20.151303	20.538816	21.335775	22.374491
1984	14.974458	15.544574	15.690378	15.837514	16.439630	17.064044	17.384862	18.044239	18.727976	19.079253	19.801184	20.741127
1985	13.994820	14.514075	14.646794	14.780694	15.328326	15.895709	16.187023	16.785339	17.405183	17.723412	18.376969	19.227001
1986	13.079271	13.551891	13.672619	13.794395	14.292146	14.807367	15.071716	15.614268	16.175820	16.463922	17.055191	17.823407
1987	12.223618	12.653493	12.763239	12.873911	13.326010	13.793542	14.033255	14.524901	15.033290	15.293936	15.828484	16.522278
1988	11.423942	11.814652	11.914342	12.014849	12.425184	12.849131	13.066345	13.511536	13.971459	14.207093	14.690008	15.316132
1989	10.676581	11.031422	11.121906	11.213111	11.585253	11.969381	12.166057	12.568870	12.984628	13.197486	13.633418	14.198037
1990	9.978114	10.300113	10.382176	10.464873	10.802101	11.149866	11.327800	11.691972	12.067498	12.259624	12.652824	13.161564
1991	9.325340	9.617286	9.691646	9.766564	10.071889	10.386461	10.547300	10.876253	11.215147	11.388411	11.742760	12.200754
1992	8.715271	8.979726	9.047044	9.114852	9.391039	9.675325	9.820577	10.117445	10.422999	10.579109	10.898154	11.310085
1993	8.145113	8.384431	8.445316	8.506628	8.756213	9.012878	9.143926	9.411577	9.686802	9.827319	10.114296	10.484436
1994	7.612255	7.828600	7.883608	7.938990	8.164301	8.395788	8.513898	8.754955	9.002604	9.128954	9.386817	9.719060
1995	7.114257	7.309618	7.359261	7.409230	7.612402	7.820948	7.927279	8.144144	8.366732	8.480217	8.711663	9.009557
1996	6.648838	6.825040	6.869789	6.914820	7.097811	7.285467	7.381079	7.575948	7.775773	7.877582	8.085070	8.351849
1997	6.213868	6.372586	6.412872	6.453402	6.618005	6.786648	6.872513	7.047394	7.226555	7.317773	7.503546	7.742155
1998	5.807353	5.950127	5.986345	6.022774	6.170634	6.321982	6.398988	6.555715	6.716129	6.797745	6.963847	7.176968
1999	5.427433	5.555674	5.588186	5.620881	5.753505	5.889131	5.958090	6.098340	6.241756	6.314673	6.462967	6.653041
2000	5.072367	5.187371	5.216510	5.245806	5.364574	5.485916	5.547570	5.672874	5.800888	5.865929	5.998114	6.167362
2001	4.740530	4.843484	4.869554	4.895759	5.001934	5.110309	5.165335	5.277092	5.391160	5.449075	5.566695	5.717137
2002	4.430402	4.522394	4.545675	4.569070	4.663808	4.760418	4.809436	4.908923	5.010372	5.061844	5.166306	5.299779
2003	4.140562	4.222590	4.243337	4.264182	4.348538	4.434483	4.478060	4.566440	4.656480	4.702131	4.794716	4.912889
2004	3.869684	3.942661	3.961108	3.979637	4.054581	4.130865	4.169516	4.247851	4.327583	4.367980	4.449852	4.554243
2005	3.616528	3.681289	3.697651	3.714081	3.780495	3.848034	3.882231	3.951489	4.021917	4.057576	4.129793	4.221778
2006	3.379932	3.437245	3.451716	3.466244	3.524937	3.584568	3.614740	3.675804	3.737842	3.769230	3.832755	3.913583
2007	3.158815	3.209379	3.222138	3.234946	3.286655	3.339142	3.365680	3.419353	3.473830	3.501375	3.557081	3.627887
2008	2.952164	2.996619	3.007831	3.019081	3.064480	3.110518	3.133780	3.180793	3.228467	3.252554	3.301235	3.363047
2009	2.759032	2.797964	2.807776	2.817621	2.857324	2.897549	2.917858	2.958877	3.000434	3.021416	3.063791	3.117541
2010	2.578534	2.612478	2.621028	2.629605	2.664172	2.699160	2.716814	2.752444	2.788507	2.806703	2.843426	2.889957
2011	2.409845	2.439288	2.446701	2.454134	2.484076	2.514355	2.529622	2.560413	2.591550	2.607249	2.638910	2.678986
2012	2.252192	2.277580	2.283968	2.290372	2.316155	2.342203	2.355328	2.381780	2.408503	2.421968	2.449105	2.483417
2013	2.104852	2.126592	2.132059	2.137538	2.159585	2.181838	2.193043	2.215609	2.238386	2.249854	2.272951	2.302125
2014	1.967151	1.985613	1.990253	1.994903	2.013599	2.032453	2.041939	2.061032	2.080284	2.089971	2.109467	2.134067
2015	1.838459	1.853981	1.857879	1.861785	1.877482	1.893296	1.901247	1.917239	1.933350	1.941450	1.957742	1.978278
2016	1.718186	1.731075	1.734310	1.737550	1.750566	1.763666	1.770249	1.783478	1.796794	1.803484	1.816930	1.833861
2017	1.605781	1.616316	1.618959	1.621606	1.632229	1.642912	1.648276	1.659049	1.669882	1.675322	1.686246	1.699987
2018	1.500730	1.509165	1.511280	1.513398	1.521892	1.530426	1.534708	1.543302	1.551935	1.556267	1.564962	1.575886
2019	1.402552	1.409118	1.410763	1.412410	1.419013	1.425641	1.428964	1.435629	1.442319	1.445673	1.452401	1.460845
2020	1.310796	1.315703	1.316932	1.318162	1.323089	1.328031	1.330507	1.335469	1.340445	1.342939	1.347936	1.354201
2021	1.225043	1.228481	1.229341	1.230202	1.233650	1.237104	1.238833	1.242297	1.245767	1.247504	1.250984	1.255343
2022	1.144900	1.147041	1.147577	1.148112	1.150256	1.152402	1.153476	1.155625	1.157776	1.158852	1.161006	1.163702
2023	1.070000	1.071000	1.071250	1.071500	1.072500	1.073500	1.074000	1.075000	1.076000	1.076500	1.077500	1.078750
2024	1.000000	1.000000	1.000000	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

<u>7.00%</u>	<u>7.10%</u>	<u>7.125%</u>	<u>7.15%</u>	<u>7.25%</u>	<u>7.35%</u>	<u>7.40%</u>	<u>7.50%</u>	<u>7.60%</u>	<u>7.65%</u>	<u>7.75%</u>	<u>7.875%</u>
0.005833	0.005917	0.005938	0.005958	0.006042	0.006125	0.006167	0.006250	0.006333	0.006375	0.006458	0.006563