

## **Parallel-Shift Sensitivity Analysis for HLB-Option and Knockout Advances**

The Federal Home Loan Bank of Boston (Bank) is providing estimated valuations of the specific HLB-Option and Knockout advances set forth below for members' information and convenience only. The estimated valuations are generated by models obtained from external sources which are used for the Bank's own asset/liability management purposes. The models include the use of specific assumptions, for example, market volatility and discount curve adjusted for the Bank's spread, to estimate the value of the advance. The valuations represent theoretical market values only and should not be construed as a liquidation price for the HLB-Option or Knockout advance.

It is expressly understood that in providing this valuation information to members, the Bank is not performing any advisory service. The valuations are being provided without representation or warranty and the member shall be solely responsible for any decision it makes or actions it takes based on the valuations provided. It is recommended that institutions maintain independent capabilities to value their asset/liability positions, including HLB-Option and Knockout advances.

The table depicts valuation estimates resulting from immediate parallel interest-rate movements of plus/minus 400 basis points in 100 basis point increments. In order to rule out negative interest rates, our model applies an effective floor of plus ten basis points to the yield curve for all down-rate scenarios. As a result, large down-rate shocks will reflect valuation at the floor rate of ten basis points in place of any negative interest rates that would otherwise be produced by the indicated basis point shocks. Please note that the valuation estimates are from the Federal Home Loan Bank of Boston's perspective. Since the advance is held by the member as a liability, positive price changes in the table correspond to the advance having a negative impact on the member's estimated market value of portfolio equity (and vice versa). The theoretical argument follows that as interest rates rise, the value of the advance to the Bank falls. In the case of an HLB-Option advance, the Bank would be likely to exercise its option to cancel the advance as the value falls below 100. In the case of a Knockout advance, the Bank would automatically terminate the advance on any specified cancellation date if LIBOR is equal to or greater than a predetermined "strike rate" four London Business days prior to the scheduled cancellation date. In either case, the member's cost to prepay the advance increases as interest rates fall.

To identify your advance, locate the appropriate maturity date and then verify the coupon rate. The report is sorted in ascending order by start date, followed by coupon. Once the appropriate structure is determined, read across to view the sensitivity analysis that has been performed on the advance.

If you have any questions or would like further explanation of this analysis, contact the Money Desk at 1-800-357-3452.

Start Date	Maturity Date	Next Call Date	Coupon	-300	-200	-100	Base	+100	+200	+300	+400
10/2/1996	10/2/2006	4/3/2006	6.5300	103.4907	102.7364	101.9945	101.2645	100.5551	100.0522	99.9959	99.9903
2/27/1997	2/27/2012	2/27/2007	6.5800	126.9841	120.6270	114.6931	109.2975	104.6930	101.2611	99.1314	97.8244
2/11/1998	2/11/2008	2/13/2006	5.5900	107.7578	105.6530	103.6016	101.6295	100.2307	99.9619	99.8553	99.7489
3/13/1998	3/13/2008	3/13/2006	5.5300	107.9249	105.7312	103.5953	101.5570	100.1641	99.8191	99.6244	99.4304
3/18/1998	3/18/2008	3/20/2006	5.6800	108.3122	106.1005	103.9470	101.8760	100.3124	100.1641	99.8191	99.6244
3/24/1998	3/24/2008	3/24/2006	5.6800	108.3842	106.1552	103.9853	101.8984	100.3193	100.1409	99.7842	99.5541
3/26/1998	3/26/2008	3/27/2006	5.4900	107.9868	105.7569	103.5864	101.5206	100.1409	99.7842	99.5541	99.3250
4/8/1998	4/8/2013	1/9/2006	5.4900	123.7631	116.5320	110.0559	104.6905	101.0719	99.9828	99.9606	99.9385
5/6/1998	5/6/2008	2/6/2006	5.7900	109.0362	106.6878	104.4045	102.2093	100.4637	99.9916	99.8988	99.8061
5/8/1998	5/8/2008	2/8/2006	5.5200	108.4314	106.0847	103.8037	101.6413	100.1980	99.9599	99.8616	99.7634
6/1/1998	6/4/2008	3/1/2006	5.5200	108.6874	106.2695	103.9207	101.6963	100.2089	99.9682	99.8808	99.7937
6/16/1998	6/16/2008	3/16/2006	5.4700	108.7040	106.2531	103.8730	101.6248	100.1488	99.8008	99.5979	99.3958
6/16/1998	6/16/2008	3/16/2006	5.7000	109.2639	106.8061	104.4187	102.1320	100.3856	99.8500	99.6453	99.4431
6/24/1998	6/24/2008	3/24/2006	5.4500	108.7460	106.2728	103.8715	101.6069	100.1376	99.8500	99.6453	99.4431
7/31/1998	7/30/2008	1/30/2006	5.3900	108.9363	106.3630	103.8678	101.5357	100.1229	99.9281	99.8453	99.7627
7/31/1998	7/30/2008	1/30/2006	5.6100	109.4976	106.9171	104.4137	102.0339	100.3104	99.9463	99.8635	99.7809
8/19/1998	8/19/2013	2/21/2006	5.4900	124.8360	117.2454	110.4859	104.9184	101.1531	99.9594	99.9069	99.8544
8/25/1998	8/19/2013	1/25/2006	5.4900	124.8360	117.2454	110.4859	104.9184	101.1531	99.9594	99.9069	99.8544
8/27/1998	8/19/2013	1/27/2006	5.4900	124.8360	117.2454	110.4859	104.9184	101.1531	99.9594	99.9069	99.8544
9/30/1998	9/30/2013	3/30/2006	5.2200	123.2350	115.6229	108.9417	103.6322	100.4895	99.9594	99.9069	99.8544
10/5/1998	10/6/2008	4/5/2006	4.4900	107.0551	104.3328	101.7509	100.1173	99.9871	99.9705	99.9539	99.9373
10/13/1998	10/14/2008	1/13/2006	4.6600	107.5926	104.8411	102.2096	100.2793	99.9766	99.9379	99.8991	99.8605
10/13/1998	10/14/2008	1/17/2006	4.6600	107.5926	104.8411	102.2096	100.2793	99.9766	99.9379	99.8991	99.8605
10/20/1998	10/20/2008	1/20/2006	4.6600	107.6477	104.8793	102.2318	100.2858	99.9667	99.9114	99.8562	99.8010
10/30/1998	10/30/2008	10/30/2003	4.9900	108.6614	105.8517	103.1313	100.4965	97.9442	95.4714	93.0754	90.7530
11/25/1998	11/25/2008	11/25/2003	5.2000	109.4678	106.5817	103.7893	101.0864	98.4698	95.9363	93.4829	91.1064
12/7/1998	12/8/2008	3/7/2006	4.9900	108.9330	106.0203	103.2197	100.8328	99.9198	99.7295	99.5485	99.3682
12/14/1998	12/16/2013	3/14/2006	4.8900	121.2812	113.6154	107.0654	102.2090	100.0260	99.6811	99.4783	99.2764
12/14/1998	12/16/2013	12/15/2008	5.3900	125.0064	117.1380	110.1981	104.5034	100.1346	96.7705	93.9764	91.4612
12/15/1998	12/16/2013	3/15/2006	4.8800	121.2067	113.5454	107.0045	102.1676	100.0149	99.6790	99.4763	99.2744
1/13/1999	1/13/2009	1/13/2006	4.9500	109.1051	106.0958	103.2091	100.7889	99.9887	99.9527	99.9167	99.8808
1/13/1999	1/13/2009	1/13/2006	4.9700	109.1649	106.1547	103.2661	100.8264	99.9894	99.9534	99.9174	99.8815
1/15/1999	1/15/2009	1/15/2004	5.1600	109.7540	106.7294	103.8068	100.9819	98.2508	95.6100	93.0563	90.5857
1/19/1999	1/20/2009	1/21/2003	4.9800	109.2649	106.2342	103.3062	100.4764	97.7409	95.0963	92.5391	90.0656
1/29/1999	1/29/2009	1/29/2003	4.9800	109.3550	106.2987	103.3465	100.4940	97.7370	95.0721	92.4959	90.0045
2/18/1999	2/18/2009	2/21/2006	4.8800	109.1926	106.0953	103.1311	100.7027	99.9793	99.8530	99.7273	99.6019
2/18/1999	2/18/2009	2/21/2006	5.0800	109.8094	106.7025	103.7178	101.1186	100.0187	99.8801	99.7543	99.6289
2/18/1999	2/18/2009	2/21/2006	5.4300	110.8889	107.7651	104.7546	101.9790	100.2214	99.9274	99.8016	99.6761
2/19/1999	2/19/2009	2/21/2006	4.8500	109.1097	106.0111	103.0478	100.6493	99.9741	99.8451	99.7167	99.5885
2/22/1999	2/23/2009	2/22/2006	4.8800	109.2413	106.1298	103.1522	100.7109	99.9741	99.8342	99.6948	99.5557
3/22/1999	3/23/2009	3/22/2006	5.0200	109.8786	106.6774	103.6134	101.0018	100.7109	99.9741	99.8342	99.6948
4/13/1999	4/13/2009	1/13/2006	4.9100	109.6708	106.4221	103.3238	100.7845	99.9873	99.9513	99.9153	99.8794
4/23/1999	4/27/2009	1/23/2006	5.1900	110.7215	107.4177	104.2502	101.4496	100.0412	99.9202	99.8457	99.7713
4/23/1999	4/27/2009	1/23/2006	5.5000	111.7328	108.4122	105.2193	102.2767	100.2970	99.9434	99.8688	99.7944
4/26/1999	4/27/2009	1/26/2006	5.1900	110.7215	107.4177	104.2502	101.4496	100.0412	99.9202	99.8457	99.7713
4/26/1999	4/27/2009	1/26/2006	5.5000	111.7328	108.4122	105.2193	102.2767	100.2970	99.9434	99.8688	99.7944
5/6/1999	5/6/2009	2/6/2006	5.3100	111.1367	107.8024	104.6064	101.7437	100.1455	99.9426	99.8498	99.7571
6/7/1999	6/8/2009	3/7/2006	5.7000	112.7433	109.2980	105.9874	102.9071	100.6024	99.8648	99.6793	99.4989
6/7/1999	6/8/2009	3/7/2006	6.0400	113.8892	110.4244	107.0912	103.9382	101.2936	100.0040	99.7420	99.5615
7/1/1999	7/1/2009	4/3/2006	6.1100	114.3449	110.8103	107.4092	104.1352	101.1450	99.9334	99.6681	99.4286
7/23/1999	7/23/2009	1/23/2006	5.4000	112.1538	108.5978	105.1944	102.1244	100.2160	99.9453	99.8817	99.8183
9/8/1999	9/8/2009	3/8/2006	5.6200	113.3242	109.6291	106.0922	102.8481	100.5243	99.8491	99.6646	99.4842
10/8/1999	10/8/2009	1/9/2006	5.5800	113.4478	109.6702	106.0605	102.7725	100.4773	99.9848	99.9626	99.9404
11/1/1999	11/2/2009	2/1/2006	5.5400	113.5159	109.6753	106.0106	102.6955	100.4445	99.9741	99.8923	99.8106
11/8/1999	11/9/2009	2/8/2006	5.9600	115.1785	111.2871	107.5629	104.0910	101.2733	100.0374	99.9053	99.8044
11/9/1999	11/9/2009	2/9/2006	5.5700	113.7089	109.8456	106.1588	102.8133	100.4879	99.9634	99.8623	99.7614
12/10/1999	12/10/2009	3/10/2006	5.7100	114.5254	110.5635	106.7828	103.3208	100.7485	99.8722	99.6727	99.4868
12/17/1999	12/17/2009	3/17/2006	5.9100	115.3816	111.3841	107.5642	104.0209	101.1894	100.7485	99.8722	99.6727
12/20/1999	12/21/2009	3/20/2006	5.8100	115.0435	111.0417	107.2206	103.6969	100.9715	99.8722	99.6727	99.4868
12/22/1999	12/22/2009	3/22/2006	5.8400	115.1720	111.1650	107.3381	103.8025	101.0387	100.7485	99.8722	99.6727
1/7/2000	1/7/2015	1/9/2006	5.9500	132.4926	123.3783	115.3026	108.5246	103.3761	100.5010	99.9744	99.9550

Start Date	Maturity Date	Next Call Date	Coupon	-300	-200	-100	Base	+100	+200	+300	+400
1/12/2000	1/12/2010	1/12/2005	6.8500	119.3207	115.1778	111.2101	107.4083	103.7646	100.2719	96.9230	93.7109
1/13/2000	1/13/2010	1/13/2006	5.9100	115.6362	111.5638	107.6761	104.0786	101.2086	100.0066	99.9512	99.9152
1/25/2000	1/25/2010	1/25/2006	5.9700	116.0227	111.9100	107.9834	104.3379	101.3811	100.0303	99.9109	99.8419
1/27/2000	1/27/2010	1/27/2006	6.0800	116.4847	112.3573	108.4146	104.7358	101.6776	100.1149	99.9120	99.8376
1/27/2000	1/27/2010	1/27/2006	6.2100	117.0011	112.8633	108.9087	105.2010	102.0374	100.2194	99.9217	99.8473
2/7/2000	2/8/2010	2/7/2006	5.9500	116.0541	111.9132	107.9616	104.2994	101.3516	100.0460	99.9078	99.8096
2/16/2000	2/8/2010	2/1/2006	5.9500	116.0541	111.9132	107.9616	104.2994	101.3516	100.0460	99.9078	99.8096
2/16/2000	2/16/2010	2/16/2006	6.4700	118.2457	114.0385	110.0164	106.2210	102.8697	100.5793	99.9463	99.8261
2/16/2000	2/16/2010	2/16/2006	6.6900	119.1307	114.9055	110.8647	107.0349	103.5834	100.9970	99.9995	99.8546
3/6/2000	3/8/2010	3/6/2006	6.3900	118.1070	113.8441	109.7736	105.9502	102.6243	100.4556	99.8112	99.6259
3/13/2000	3/15/2010	3/13/2006	6.0900	116.9748	112.7162	108.6553	104.8811	101.7551	100.0989	99.7288	99.5293
3/14/2000	3/15/2010	2/14/2006	6.0900	116.9748	112.7162	108.6553	104.8811	101.7551	100.0989	99.7288	99.5293
3/15/2000	3/15/2010	3/15/2006	5.9500	116.4019	112.1552	108.1090	104.3740	101.3748	99.9804	99.7003	99.5009
3/21/2000	3/22/2010	3/21/2006	6.1200	117.1878	112.9058	108.8225	105.0225	101.8528	100.1219	99.9804	99.7003
3/22/2000	3/22/2010	3/22/2006	5.9600	116.5302	112.2619	108.1954	104.4395	101.4136	100.1219	99.9804	99.7003
3/28/2000	3/28/2007	3/28/2006	6.1100	105.1889	103.9521	102.7388	101.5506	100.4848	99.9804	99.7003	99.5009
4/5/2000	4/5/2010	4/5/2006	5.9500	116.5885	112.2868	108.1911	104.4156	101.3931	100.0503	99.9817	99.9678
4/11/2000	4/12/2010	1/11/2006	5.9500	116.6756	112.3530	108.2382	104.4447	101.4050	100.0442	99.9562	99.9230
4/11/2000	4/12/2010	1/11/2006	6.0500	117.0919	112.7606	108.6345	104.8119	101.6773	100.1207	99.9595	99.9264
4/11/2000	4/12/2010	1/11/2006	6.4700	118.8404	114.4722	110.3039	106.3851	102.9452	100.5950	99.9735	99.9403
4/11/2000	4/12/2010	1/11/2006	6.5600	119.2151	114.8390	110.6622	106.7271	103.2393	100.7545	99.9764	99.9432
4/11/2000	4/12/2010	1/11/2006	6.7500	120.0060	115.6134	111.4191	107.4529	103.8799	101.1622	100.0119	99.9495
4/12/2000	4/12/2010	1/12/2006	5.9900	116.8421	112.5161	108.3967	104.5911	101.5134	100.0744	99.9576	99.9244
4/13/2000	4/13/2010	1/13/2006	6.5600	119.2291	114.8500	110.6704	106.7327	103.2425	100.7552	99.9745	99.9385
4/24/2000	4/24/2007	1/24/2006	6.1600	105.5653	104.2567	102.9729	101.7144	100.5678	99.9933	99.9270	99.8607
4/24/2000	4/26/2010	1/24/2006	6.4500	118.9498	114.5410	110.3353	106.3840	102.9217	100.5705	99.9418	99.8701
5/2/2000	5/2/2007	2/2/2006	6.1000	105.5363	104.2058	102.9002	101.6213	100.4838	100.0271	99.9433	99.8616
5/3/2000	5/3/2010	2/3/2006	6.2400	118.0763	113.6682	109.4697	105.5609	102.2496	100.3114	99.9532	99.8687
5/3/2000	5/3/2010	2/3/2006	6.3600	118.5822	114.1633	109.9522	106.0155	102.6206	100.4665	99.9645	99.8800
5/15/2000	5/17/2010	2/15/2006	6.9900	121.4505	116.9318	112.6201	108.5374	104.8142	101.8005	100.2051	99.8899
5/30/2000	6/1/2010	2/28/2006	6.4900	119.4552	114.9441	110.6466	106.6196	103.0966	100.6654	99.9865	99.9020
6/5/2000	6/5/2007	3/6/2006	6.4200	106.3947	104.9694	103.5711	102.1992	100.9021	100.1041	99.9410	99.8373
6/7/2000	6/5/2007	2/7/2006	6.4200	106.3947	104.9694	103.5711	102.1992	100.9024	100.1114	99.9654	99.8754
6/21/2000	6/21/2007	3/21/2006	6.2000	106.2970	104.8282	103.3876	101.9755	100.6804	99.9727	99.7340	99.5182
6/23/2000	6/25/2007	3/23/2005	6.3600	106.5880	105.1059	103.6524	102.2269	100.8867	100.0430	100.0000	100.0000
8/8/2000	8/8/2007	2/8/2006	6.0300	106.5671	104.9661	103.3983	101.8653	100.5229	100.0157	99.9164	99.8182
8/8/2000	8/9/2010	2/8/2006	5.9900	118.0043	113.3427	108.9253	104.8836	101.6445	100.1090	99.9086	99.8077
8/18/2000	8/18/2010	2/21/2006	6.0900	118.5657	113.8670	109.4112	105.3149	101.9533	100.1851	99.8907	99.7651
8/25/2000	8/27/2007	2/27/2006	5.9500	106.6824	105.0282	103.4087	101.8272	100.4702	99.9902	99.8397	99.6895
9/18/2000	9/18/2007	3/20/2006	5.9800	106.9687	105.2565	103.5812	101.9451	100.5217	99.9902	99.8397	99.6895
10/5/2000	10/5/2010	4/5/2006	5.7100	117.2606	112.4706	107.9571	103.9237	100.9671	99.9922	99.9784	99.9645
10/10/2000	10/12/2010	1/10/2006	5.8400	117.9444	113.1193	108.5648	104.4541	101.2877	100.0038	99.9526	99.9194
10/13/2000	10/13/2010	1/13/2006	5.7500	117.5399	112.7217	108.1795	104.1070	101.0697	99.9814	99.9454	99.9095
10/23/2000	10/25/2010	1/23/2006	5.6400	117.1694	112.3282	107.7733	103.7251	100.8253	99.9571	99.8881	99.8191
10/27/2000	10/27/2010	1/27/2006	6.0400	119.0592	114.1671	109.5423	105.3215	101.9079	100.1599	99.9091	99.8346
10/30/2000	10/30/2007	1/30/2006	5.8500	107.2172	105.3872	103.5985	101.8569	100.4167	99.9662	99.8834	99.8007
11/8/2000	11/8/2007	2/8/2006	5.9400	107.4493	105.5974	103.7881	102.0248	100.5168	100.0052	99.9067	99.8086
12/5/2000	12/6/2010	3/6/2006	5.4100	116.3945	111.4693	106.8718	102.9108	100.4131	99.8137	99.6360	99.4611
12/11/2000	12/13/2010	3/13/2006	5.1700	115.3232	110.4080	105.8558	102.0803	100.1056	99.7478	99.5531	99.3593
12/12/2000	12/13/2010	3/13/2006	5.1100	115.0362	110.1289	105.5957	101.8813	100.0506	99.7359	99.5412	99.3474
12/15/2000	12/15/2010	3/15/2006	5.1200	115.1044	110.1900	105.6483	101.9183	100.0589	99.7317	99.5315	99.3323
12/20/2000	12/20/2010	3/20/2006	4.7800	113.5229	108.6419	104.2168	100.9270	100.0506	99.7359	99.5412	99.3474
12/20/2000	12/20/2010	3/20/2006	4.9500	114.3391	109.4335	104.9377	101.3960	100.0506	99.7359	99.5412	99.3474
12/21/2000	12/21/2010	3/21/2006	4.8600	113.9165	109.0210	104.5574	101.1364	100.0506	99.7359	99.5412	99.3474
12/26/2000	12/27/2010	3/27/2006	4.8000	113.6844	108.7806	104.3278	100.9872	100.0506	99.7359	99.5412	99.3474
1/11/2001	1/11/2011	1/11/2006	5.3700	116.5115	111.4927	106.8239	102.8378	100.4029	99.9727	99.9423	99.9118
1/12/2001	1/12/2011	1/12/2006	5.3000	116.1822	111.1698	106.5169	102.5864	100.3086	99.9679	99.9347	99.9015
1/16/2001	1/18/2011	1/17/2006	4.7800	113.7115	108.7552	104.2705	100.9467	99.9760	99.9262	99.8764	99.8268
1/19/2001	1/19/2011	1/19/2006	5.8300	118.8416	113.7408	108.9485	104.6567	101.3829	100.0281	99.9247	99.8722
1/22/2001	1/24/2011	1/23/2006	4.5000	112.3983	107.4727	103.1301	100.3596	99.9496	99.8832	99.8170	99.7508
1/26/2001	1/26/2011	1/26/2006	4.7200	113.4923	108.5227	104.0463	100.8089	99.9612	99.8894	99.8176	99.7460

Start Date	Maturity Date	Next Call Date	Coupon	-300	-200	-100	Base	+100	+200	+300	+400
2/5/2001	2/7/2011	2/6/2006	4.5800	112.8477	107.8806	103.4718	100.5048	99.9593	99.8634	99.7678	99.6725
2/5/2001	2/7/2011	2/6/2006	4.8200	114.0292	109.0218	104.4850	101.0651	99.9887	99.8886	99.7930	99.6977
2/7/2001	2/7/2011	2/7/2006	4.8200	114.0292	109.0218	104.4850	101.0651	99.9887	99.8886	99.7930	99.6977
2/12/2001	2/14/2011	2/13/2006	4.4000	112.0197	107.0679	102.7630	100.2402	99.9238	99.8086	99.6939	99.5795
2/12/2001	2/14/2011	2/13/2006	4.5700	112.8597	107.8746	103.4538	100.4926	99.9449	99.8297	99.7150	99.6005
2/26/2001	2/28/2011	2/27/2006	4.5000	112.6250	107.6082	103.1947	100.3729	99.8638	99.7021	99.5410	99.3803
2/26/2001	2/28/2011	2/27/2006	4.7900	114.0685	109.0002	104.4198	101.0047	99.9136	99.7492	99.5881	99.4274
2/26/2001	2/28/2011	2/27/2006	5.0600	115.4125	110.3023	105.6092	101.8158	100.0308	99.7931	99.6319	99.4712
2/26/2001	2/28/2011	2/27/2006	5.4500	117.3540	112.1890	107.3779	103.2247	100.5072	99.8566	99.6953	99.5345
2/27/2001	2/28/2011	2/27/2006	4.7600	113.9191	108.8557	104.2900	100.9282	99.9061	99.7443	99.5832	99.4225
2/27/2001	2/28/2011	2/27/2006	5.0200	115.2134	110.1092	105.4306	101.6872	99.9955	99.7866	99.6254	99.4647
3/1/2001	3/1/2011	3/1/2006	5.2700	116.3864	111.2506	106.5012	102.5206	100.2347	99.8002	99.6383	99.4770
3/5/2001	3/7/2011	3/6/2006	3.9900	110.0599	105.1631	101.2786	99.9168	99.7302	99.5512	99.3731	99.1958
3/12/2001	3/13/2006	3/13/2006	4.4200	100.5862	100.3869	100.1885	99.9912	99.7947	99.5991	99.4047	99.2110
3/12/2001	3/14/2011	3/13/2006	4.8100	114.2184	109.1152	104.5079	101.0602	99.8852	99.6725	99.4752	99.2787
3/14/2001	3/14/2011	3/14/2006	4.8600	114.4690	109.3576	104.7266	101.1972	99.9057	99.6825	99.4852	99.2887
3/26/2001	3/27/2006	3/27/2006	4.5400	100.7374	100.4991	100.2619	100.0261	99.9057	99.6825	99.4852	99.2887
4/10/2001	4/11/2011	1/10/2006	4.6500	113.5913	108.4460	103.8696	100.6790	99.9813	99.9508	99.9204	99.8900
4/10/2001	4/11/2011	4/10/2006	5.1500	116.1317	110.8911	105.9305	101.4636	99.9261	99.6387	99.3710	99.1049
4/17/2001	4/17/2006	1/17/2006	4.3300	100.8256	100.5327	100.2417	100.0033	99.9562	99.9091	99.8622	99.8152
4/23/2001	4/25/2011	4/24/2006	5.3500	117.2987	111.9912	106.9684	102.3035	100.0400	99.6598	99.3542	99.0505
5/8/2001	5/9/2011	2/8/2006	4.4300	112.6249	107.4556	102.9850	100.3051	99.9390	99.8375	99.7365	99.6358
6/1/2001	6/1/2011	3/1/2006	4.9900	115.6574	110.3217	105.4764	101.6668	99.9829	99.7539	99.5920	99.4308
7/13/2001	7/13/2006	1/13/2006	5.2400	101.8545	101.3210	100.7939	100.2799	100.0282	99.9631	99.9271	99.8912
8/14/2001	8/14/2006	2/14/2006	4.8300	101.8798	101.2605	100.6496	100.1248	99.9772	99.8620	99.7472	99.6327
8/20/2001	8/22/2011	8/21/2006	5.0900	116.8303	111.2346	105.9568	101.4932	99.6712	98.9984	98.3963	97.8020
9/4/2001	9/6/2011	9/5/2006	4.8800	115.7567	110.1573	104.8861	100.8334	99.4439	98.7774	98.1473	97.5260
11/5/2001	11/7/2011	5/5/2006	3.8500	110.4084	104.8064	100.4707	99.7249	99.3837	99.0456	98.7102	98.3775
12/4/2001	12/5/2011	12/4/2006	4.5900	114.7120	108.9181	103.5555	100.1165	98.8673	98.0051	97.1718	96.3537
12/5/2001	12/5/2011	12/5/2006	4.6000	114.7687	108.9732	103.6039	100.1362	98.8771	98.0143	97.1809	96.3627
12/13/2001	12/13/2011	12/13/2006	4.9200	116.6608	110.8276	105.6178	101.6002	99.3744	98.2890	97.4231	96.5833
1/14/2002	1/17/2012	1/17/2006	3.9500	111.3110	105.7037	101.4052	99.9854	99.9383	99.8913	99.8443	99.7974
1/31/2002	1/31/2012	1/31/2007	4.8900	116.8669	110.8671	105.2579	100.9647	99.1006	98.0389	97.0591	96.0980
2/11/2002	2/12/2007	2/13/2006	4.0900	102.4025	101.3094	100.3145	100.0017	99.8917	99.7821	99.6729	99.5639
2/15/2002	2/15/2007	2/15/2006	4.1100	102.4484	101.3468	100.3319	100.0029	99.8846	99.7667	99.6493	99.5322
3/20/2002	3/20/2007	3/20/2006	4.4700	103.0843	101.8830	100.7269	100.0200	99.7895	99.5749	99.3614	99.1489
4/8/2002	4/9/2007	1/9/2006	4.3700	103.0865	101.8358	100.6368	100.0356	99.9777	99.9528	99.9279	99.9030
4/25/2002	4/25/2007	1/25/2006	4.3500	103.1967	101.9016	100.6614	100.0365	99.9371	99.8680	99.7991	99.7302
4/26/2002	4/26/2012	4/26/2007	4.9200	117.6127	111.3830	105.5914	101.1757	99.0000	97.6860	96.4950	95.3298
5/2/2002	5/2/2007	2/2/2006	4.2900	103.1211	101.8074	100.5604	100.0247	99.9423	99.8602	99.7784	99.6969
5/14/2002	5/14/2007	5/16/2005	4.2400	103.1524	101.8057	100.4846	99.1881	97.9154	96.6662	95.4402	94.2360
5/14/2002	5/14/2007	2/14/2006	4.2200	103.1250	101.7786	100.5139	100.0170	99.9014	99.7863	99.6716	99.5572
6/3/2002	6/4/2012	3/3/2006	4.4900	115.1861	109.0493	103.8557	100.5506	99.8293	99.6566	99.4867	99.3174
6/4/2002	6/4/2012	3/6/2006	4.4900	115.1861	109.0493	103.8557	100.5506	99.8293	99.6566	99.4867	99.3174
6/19/2002	6/19/2007	3/20/2006	3.9900	103.0336	101.5951	100.3151	99.9014	99.6885	99.4768	99.2661	99.0564
6/24/2002	6/25/2012	6/25/2007	4.3900	114.7420	108.4573	102.9317	99.6712	98.0151	96.6465	95.3198	94.0179
6/28/2002	6/28/2007	3/28/2006	3.7900	102.8031	101.3425	100.1646	99.8469	99.6095	99.3734	99.1385	98.9047
7/8/2002	7/9/2007	1/9/2006	3.8300	102.8878	101.3964	100.1770	99.9892	99.9643	99.9393	99.9145	99.8896
7/12/2002	7/12/2007	1/12/2006	3.7700	102.8173	101.3185	100.1448	99.9837	99.9504	99.9172	99.8840	99.8509
7/24/2002	7/24/2007	1/24/2006	3.5900	102.6192	101.0917	100.0753	99.9556	99.8892	99.8229	99.7567	99.6906
7/25/2002	7/25/2007	1/25/2006	3.5800	102.6100	101.0800	100.0730	99.9530	99.8839	99.8149	99.7459	99.6771
7/26/2002	7/26/2012	7/26/2007	3.8900	111.7822	105.5475	100.8561	98.6266	97.1268	95.7044	94.3115	92.9453
8/7/2002	8/7/2007	2/7/2006	3.2900	102.1808	100.6401	100.0162	99.9200	99.8238	99.7280	99.6326	99.5374
8/12/2002	8/13/2007	2/13/2006	3.2900	102.2142	100.6570	100.0167	99.9039	99.7913	99.6790	99.5671	99.4556
8/28/2002	8/28/2007	2/28/2006	3.2900	102.2977	100.6994	100.0181	99.8640	99.7101	99.5568	99.4040	99.2517
11/4/2002	11/5/2012	11/5/2007	3.3500	108.6436	102.6306	99.2666	97.3856	95.7001	94.0588	92.4543	90.8851
11/21/2002	11/21/2012	11/21/2007	3.4400	109.3190	103.1589	99.5111	97.5185	95.7887	94.1079	92.4656	90.8598
12/5/2002	12/5/2012	3/6/2006	3.7900	111.6385	105.4674	101.0917	99.8794	99.7019	99.5284	99.3558	99.1840
2/25/2003	2/25/2008	2/27/2006	2.8500	102.0656	100.2294	99.9497	99.8038	99.6583	99.5132	99.3687	99.2246
3/4/2003	3/4/2008	3/6/2006	2.8100	101.9511	100.1577	99.8791	99.7070	99.5356	99.3650	99.1954	99.0265
3/6/2003	3/6/2013	3/6/2008	2.9900	106.6912	101.3661	98.3010	96.1792	94.2197	92.3157	90.4605	88.6517

Start Date	Maturity Date	Next Call Date	Coupon	-300	-200	-100	Base	+100	+200	+300	+400
3/11/2003	1/24/2011	1/23/2006	4.6900	113.3273	108.3684	103.9129	100.7338	99.9622	99.8958	99.8296	99.7634
3/11/2003	2/7/2011	2/6/2006	4.5800	112.8477	107.8806	103.4718	100.5048	99.9593	99.8634	99.7678	99.6725
12/9/2003	12/9/2008	12/11/2006	2.8300	102.6845	100.1525	98.9736	98.0875	97.2193	96.3677	95.5321	94.7116
1/20/2004	1/22/2008	1/20/2006	2.6600	101.5754	100.0798	99.9635	99.9026	99.8418	99.7811	99.7204	99.6598
1/27/2004	1/27/2009	1/27/2006	2.8900	103.0093	100.4012	99.9725	99.8978	99.8232	99.7487	99.6743	99.6000
2/3/2004	2/5/2007	2/3/2006	2.5600	100.6641	100.0344	99.9433	99.8526	99.7621	99.6718	99.5820	99.4923
2/5/2004	2/14/2006	2/14/2006	4.7700	100.4341	100.3174	100.2012	100.0854	99.9698	99.8545	99.7398	99.6253
2/5/2004	2/20/2008	2/21/2006	5.4800	107.6300	105.5019	103.4284	101.4480	100.1596	99.9299	99.7986	99.6676
2/5/2004	12/18/2008	12/19/2005	5.1500	109.5010	106.5528	103.7022	100.9447	98.2768	95.6954	93.1973	90.7789
2/5/2004	4/26/2010	1/24/2006	6.2000	117.8998	113.5134	109.3340	105.4417	102.1559	100.2684	99.9239	99.8521
2/5/2004	12/14/2010	3/14/2006	5.8200	118.4445	113.4459	108.7418	104.5209	101.2973	99.9317	99.6778	99.4811
2/9/2004	2/9/2007	2/9/2006	2.5900	100.7114	100.0411	99.9389	99.8372	99.7356	99.6344	99.5336	99.4330
2/9/2004	2/9/2009	2/9/2006	3.1100	103.6886	100.8562	99.9965	99.8947	99.7931	99.6918	99.5909	99.4903
2/17/2004	2/20/2007	2/17/2006	2.4100	100.5504	100.0257	99.8932	99.7612	99.6294	99.4981	99.3673	99.2368
2/17/2004	2/17/2009	2/17/2006	2.9100	103.1131	100.4392	99.9666	99.8428	99.7192	99.5960	99.4733	99.3509
2/26/2004	2/26/2007	2/27/2006	2.4100	100.5694	100.0283	99.8792	99.7307	99.5825	99.4347	99.2876	99.1409
3/4/2004	3/4/2009	3/6/2006	2.9700	103.2925	100.5371	99.9070	99.7349	99.5634	99.3928	99.2231	99.0542
3/12/2004	3/12/2007	3/13/2006	2.2200	100.3448	99.9485	99.7535	99.5595	99.3663	99.1742	98.9830	98.7927
3/12/2004	3/12/2009	3/13/2006	2.6900	102.4549	100.1267	99.8457	99.6517	99.4583	99.2660	99.0747	98.8843
3/17/2004	3/19/2007	3/17/2006	2.1800	100.3222	99.9391	99.7249	99.5118	99.2995	99.0883	98.8783	98.6691
4/1/2004	4/1/2009	4/3/2006	2.7700	102.7251	100.2079	99.8025	99.5581	99.3151	99.0738	98.8341	98.5959
4/30/2004	4/30/2009	5/1/2006	2.5900	102.2573	100.0305	99.5838	99.1758	98.7710	98.3697	97.9717	97.5768
5/24/2004	5/26/2009	2/24/2006	3.5800	105.5801	102.3324	100.1677	99.9150	99.7665	99.6186	99.4712	99.3243
5/28/2004	5/28/2009	5/30/2006	3.7000	105.9937	102.7198	100.2874	99.6409	99.2430	98.8486	98.4575	98.0694
6/11/2004	6/11/2009	3/13/2006	3.7500	106.1916	102.8798	100.3611	99.8608	99.6699	99.4801	99.2912	99.1032
6/18/2004	6/20/2011	6/19/2006	4.1200	111.2724	106.0835	101.8507	99.8382	99.2968	98.8473	98.4024	97.9616
6/18/2004	6/18/2014	6/18/2007	3.6200	112.4951	105.3857	100.6578	98.3632	96.9233	95.5938	94.2923	93.0146
7/2/2004	7/2/2014	7/3/2006	3.9900	115.3833	107.8639	102.3156	99.7922	99.1333	98.6540	98.1811	97.7133
8/5/2004	8/5/2009	2/6/2006	3.4700	105.4297	102.0489	100.0837	99.9433	99.8526	99.7623	99.6724	99.5826
9/1/2004	9/1/2009	3/1/2006	3.1500	104.3779	101.0941	99.9401	99.7754	99.6121	99.4496	99.2881	99.1272
9/2/2004	9/2/2009	3/2/2006	3.0700	104.0965	100.8770	99.9255	99.7589	99.5928	99.4277	99.2634	99.0999
9/14/2004	9/14/2009	9/14/2006	2.8700	103.4336	100.3927	99.3454	98.6702	98.0056	97.3506	96.7051	96.0685
9/15/2004	9/15/2009	3/15/2006	2.9900	103.8710	100.6985	99.9024	99.7000	99.4984	99.2979	99.0984	98.8997
9/20/2004	9/21/2009	9/20/2006	2.9600	103.7857	100.4982	99.4028	98.7092	98.0259	97.3525	96.6888	96.0342
9/27/2004	9/28/2009	3/27/2006	3.1700	104.5886	101.2182	99.9374	99.6981	99.4610	99.2251	98.9904	98.7568
11/23/2004	11/23/2009	11/24/2006	3.2600	105.0796	101.4063	99.4887	98.6187	97.7840	96.9639	96.1580	95.3656
11/23/2004	11/23/2009	11/24/2006	3.2700	105.1177	101.4405	99.4988	98.6276	97.7928	96.9727	96.1668	95.3743
12/13/2004	12/15/2014	12/13/2007	3.3200	110.6531	103.7040	99.5197	97.2269	95.4117	93.6765	91.9839	90.3300
12/17/2004	12/17/2009	3/17/2006	3.7100	106.8757	103.1086	100.3703	99.8441	99.6368	99.4306	99.2255	99.0212
1/27/2005	1/27/2010	1/27/2006	3.1500	104.8493	101.2398	99.9919	99.9172	99.8426	99.7681	99.6937	99.6194
3/22/2005	3/22/2010	3/22/2007	4.0200	108.5566	104.4907	101.0756	99.0862	97.8731	96.7549	95.6588	94.5821
4/28/2005	4/28/2010	4/30/2007	3.8600	108.0861	103.9068	100.4754	98.7674	97.5226	96.3179	95.1357	93.9746
4/28/2005	4/28/2010	4/30/2007	3.9200	108.3387	104.1999	100.8133	98.8829	97.6007	96.3947	95.2120	94.0504
5/5/2005	5/5/2010	5/5/2006	4.1900	109.4497	105.2515	101.6508	99.9065	99.5081	99.1750	98.8448	98.5171
5/17/2005	5/17/2010	5/17/2006	4.0700	109.0332	104.8231	101.3082	99.8282	99.4283	99.0630	98.7008	98.3414
6/6/2005	6/7/2010	6/6/2006	3.8900	108.3454	104.1267	100.8144	99.6665	99.2369	98.8226	98.4123	98.0059
7/18/2005	7/19/2010	7/18/2006	4.1600	109.7502	105.3662	101.6494	99.7822	99.1679	98.6437	98.1258	97.6135
7/25/2005	7/26/2010	7/25/2008	4.2300	110.1143	105.6953	101.8131	98.7838	96.3132	94.0457	91.8655	89.7496
8/1/2005	8/1/2008	8/1/2006	4.2700	106.0351	103.4979	101.1344	99.7557	99.1406	98.5881	98.0431	97.5048
8/17/2005	8/17/2015	8/17/2006	4.0300	117.3625	108.3270	101.3292	99.5663	98.9488	98.3547	97.7684	97.1892
9/1/2005	9/1/2015	9/1/2006	4.1300	118.3391	109.8294	103.4473	100.0283	98.9386	98.2998	97.6846	97.0780
9/12/2005	9/14/2015	9/12/2007	3.6500	114.2195	106.2700	100.9738	98.2334	96.5167	94.9769	93.4795	92.0131
9/19/2005	9/19/2012	9/19/2007	3.8200	111.5686	105.5151	101.0355	98.4788	96.7755	95.2237	93.7124	92.2325
9/26/2005	9/27/2010	9/26/2006	3.8000	108.4858	104.0193	100.6400	99.3198	98.6051	97.9136	97.2321	96.5601
9/26/2005	9/26/2012	9/26/2007	3.8900	112.0595	105.9362	101.3280	98.7286	97.0962	95.6344	94.2118	92.8186
9/30/2005	9/30/2015	9/30/2008	4.4400	121.3027	112.4171	105.3625	100.3774	96.9492	94.2781	91.8957	89.6348
10/3/2005	10/4/2010	10/3/2006	3.9500	109.1427	104.6223	101.0197	99.3773	98.6154	97.9106	97.2173	96.5346
10/3/2005	10/4/2010	10/3/2006	4.1200	109.9247	105.3058	101.2135	99.4900	98.7429	98.0377	97.3439	96.6607
10/3/2005	10/3/2012	10/3/2007	4.1500	113.6678	107.2002	101.9406	99.0239	97.2379	95.6461	94.0991	92.5852
10/11/2005	10/12/2010	10/11/2006	4.0500	109.6624	105.0936	101.3438	99.4842	98.6655	97.9392	97.2250	96.5217
10/19/2005	10/19/2010	10/19/2006	4.1200	110.0393	105.4345	101.5877	99.5650	98.6996	97.9540	97.2217	96.5005

Start Date	Maturity Date	Next Call Date	Coupon	-300	-200	-100	Base	+100	+200	+300	+400
10/26/2005	10/26/2015	10/27/2008	4.5400	122.3129	113.2926	106.0556	100.8492	97.2276	94.4278	91.9666	89.6486
10/28/2005	10/28/2015	10/29/2007	4.1400	118.7477	110.0882	103.5553	99.5359	97.2402	95.5104	93.8974	92.3271
10/28/2005	10/28/2015	10/28/2008	4.3100	120.2672	111.4378	104.5462	99.7597	96.4338	93.7673	91.3514	89.0475
11/4/2005	11/4/2010	11/6/2006	4.2900	110.8832	106.2091	102.1876	99.7745	98.7479	97.9662	97.2046	96.4556
11/4/2005	11/4/2010	11/5/2007	4.5200	111.9605	107.2450	103.0528	99.9415	97.8376	96.1208	94.4952	92.9097
11/21/2005	11/21/2012	11/21/2007	4.2900	114.8799	108.4204	103.1550	100.2274	99.7477	99.5304	99.3143	99.0991
12/1/2005	12/3/2012	12/1/2006	4.0700	113.4483	107.0889	102.1390	99.4913	98.3919	97.5431	96.7172	95.9062
12/2/2005	12/2/2010	12/4/2006	4.2300	110.7406	106.0093	101.9905	99.6106	98.5388	97.6931	96.8691	96.0599
12/2/2005	12/2/2015	3/2/2006	3.7500	115.3261	107.1049	101.5668	99.8847	99.7073	99.5420	99.3776	99.2139
12/8/2005	12/10/2007	3/8/2006	4.3300	104.6922	102.7797	100.9502	99.9849	99.7844	99.5971	99.4108	99.2254
12/12/2005	12/14/2015	12/12/2006	3.9300	117.0153	108.5186	102.4360	99.4077	98.2291	97.3504	96.4972	95.6595
12/13/2005	12/14/2015	12/13/2006	3.9300	117.0153	108.5186	102.4360	99.4077	98.2291	97.3504	96.4972	95.6595
12/15/2005	12/15/2015	3/15/2006	3.7500	115.4091	107.1529	101.5827	99.8665	99.6534	99.4526	99.2529	99.0541
12/19/2005	12/19/2012	6/19/2006	3.9800	112.9751	106.6268	101.8039	99.7634	99.2347	98.7881	98.3460	97.9080
12/20/2005	12/21/2015	12/20/2006	3.9200	116.9731	108.4699	102.3948	99.3803	98.1952	97.2990	96.4283	95.5733
12/22/2005	12/22/2008	12/24/2007	4.7500	108.3698	105.4277	102.6041	100.1185	98.1060	96.3021	94.5659	92.8716
12/23/2005	12/23/2015	12/26/2006	3.9600	117.3469	108.7888	102.6112	99.4660	98.2292	97.3254	96.4493	95.5893