

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)
Ref CPI and Index Ratios for
November 2020

Security:			3-5/8% 30-Year TIPS	3-7/8% 30-Year TIPS	3-3/8% 30-1/2-Year TIPS	2-3/8% 20-1/2-Year TIPS
Description:			TIPS of April 2028	TIPS of April 2029	TIPS of April 2032	TIPS of January 2025
CUSIP Number:			912810FD5	912810FH6	912810FQ6	912810FR4
Dated Date:			April 15, 1998	April 15, 1999	October 15, 2001	July 15, 2004
Original Issue Date:			April 15, 1998	April 15, 1999	October 15, 2001	July 30, 2004
Additional Issue Date(s):			July 15, 1998	October 15, 1999 October 16, 2000		January 31, 2005 July 29, 2005
Maturity Date:			April 15, 2028	April 15, 2029	April 15, 2032	January 15, 2025
Ref CPI on Dated Date:			161.74000	164.39333	177.50000	188.49677
Date	Ref CPI	Index Ratio	Index Ratio	Index Ratio	Index Ratio	
November 1 2020	259.91800	1.60701	1.58107	1.46433	1.37890	
November 2 2020	259.93007	1.60709	1.58115	1.46439	1.37896	
November 3 2020	259.94213	1.60716	1.58122	1.46446	1.37903	
November 4 2020	259.95420	1.60724	1.58129	1.46453	1.37909	
November 5 2020	259.96627	1.60731	1.58137	1.46460	1.37916	
November 6 2020	259.97833	1.60738	1.58144	1.46467	1.37922	
November 7 2020	259.99040	1.60746	1.58151	1.46473	1.37928	
November 8 2020	260.00247	1.60753	1.58159	1.46480	1.37935	
November 9 2020	260.01453	1.60761	1.58166	1.46487	1.37941	
November 10 2020	260.02660	1.60768	1.58173	1.46494	1.37948	
November 11 2020	260.03867	1.60776	1.58181	1.46501	1.37954	
November 12 2020	260.05073	1.60783	1.58188	1.46507	1.37960	
November 13 2020	260.06280	1.60791	1.58195	1.46514	1.37967	
November 14 2020	260.07487	1.60798	1.58203	1.46521	1.37973	
November 15 2020	260.08693	1.60806	1.58210	1.46528	1.37980	
November 16 2020	260.09900	1.60813	1.58217	1.46535	1.37986	
November 17 2020	260.11107	1.60820	1.58225	1.46541	1.37992	
November 18 2020	260.12313	1.60828	1.58232	1.46548	1.37999	
November 19 2020	260.13520	1.60835	1.58240	1.46555	1.38005	
November 20 2020	260.14727	1.60843	1.58247	1.46562	1.38012	
November 21 2020	260.15933	1.60850	1.58254	1.46569	1.38018	
November 22 2020	260.17140	1.60858	1.58262	1.46575	1.38024	
November 23 2020	260.18347	1.60865	1.58269	1.46582	1.38031	
November 24 2020	260.19553	1.60873	1.58276	1.46589	1.38037	
November 25 2020	260.20760	1.60880	1.58284	1.46596	1.38044	
November 26 2020	260.21967	1.60888	1.58291	1.46603	1.38050	
November 27 2020	260.23173	1.60895	1.58298	1.46609	1.38056	
November 28 2020	260.24380	1.60903	1.58306	1.46616	1.38063	
November 29 2020	260.25587	1.60910	1.58313	1.46623	1.38069	
November 30 2020	260.26793	1.60917	1.58320	1.46630	1.38076	
CPI-U (NSA) for:			July 2020 259.101	August 2020 259.918	September 2020 260.28	

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)
Ref CPI and Index Ratios for
November 2020

Security: Description: CUSIP Number: Dated Date: Original Issue Date: Additional Issue Date(s):			2% 20-Year TIPS TIPS of January 2026 912810FS2 January 15, 2006 January 31, 2006 July 31, 2006	2-3/8% 20-Year TIPS TIPS of January 2027 912810PS1 January 15, 2007 January 31, 2007 July 31, 2007	1-3/4% 20-Year TIPS TIPS of January 2028 912810PV4 January 15, 2008 January 31, 2008 July 31, 2008	2-1/2% 20-Year TIPS TIPS of January 2029 912810PZ5 January 15, 2009 January 30, 2009 July 31, 2009
Maturity Date: Ref CPI on Dated Date:			January 15, 2026 198.47742	January 15, 2027 201.66452	January 15, 2028 209.49645	January 15, 2029 214.69971
Date	Ref CPI	Index Ratio	Index Ratio	Index Ratio	Index Ratio	
November 1 2020	259.91800	1.30956	1.28886	1.24068	1.21061	
November 2 2020	259.93007	1.30962	1.28892	1.24074	1.21067	
November 3 2020	259.94213	1.30968	1.28898	1.24079	1.21072	
November 4 2020	259.95420	1.30974	1.28904	1.24085	1.21078	
November 5 2020	259.96627	1.30980	1.28910	1.24091	1.21084	
November 6 2020	259.97833	1.30986	1.28916	1.24097	1.21089	
November 7 2020	259.99040	1.30992	1.28922	1.24103	1.21095	
November 8 2020	260.00247	1.30999	1.28928	1.24108	1.21101	
November 9 2020	260.01453	1.31005	1.28934	1.24114	1.21106	
November 10 2020	260.02660	1.31011	1.28940	1.24120	1.21112	
November 11 2020	260.03867	1.31017	1.28946	1.24126	1.21117	
November 12 2020	260.05073	1.31023	1.28952	1.24131	1.21123	
November 13 2020	260.06280	1.31029	1.28958	1.24137	1.21129	
November 14 2020	260.07487	1.31035	1.28964	1.24143	1.21134	
November 15 2020	260.08693	1.31041	1.28970	1.24149	1.21140	
November 16 2020	260.09900	1.31047	1.28976	1.24154	1.21145	
November 17 2020	260.11107	1.31053	1.28982	1.24160	1.21151	
November 18 2020	260.12313	1.31059	1.28988	1.24166	1.21157	
November 19 2020	260.13520	1.31065	1.28994	1.24172	1.21162	
November 20 2020	260.14727	1.31071	1.29000	1.24177	1.21168	
November 21 2020	260.15933	1.31078	1.29006	1.24183	1.21174	
November 22 2020	260.17140	1.31084	1.29012	1.24189	1.21179	
November 23 2020	260.18347	1.31090	1.29018	1.24195	1.21185	
November 24 2020	260.19553	1.31096	1.29024	1.24200	1.21190	
November 25 2020	260.20760	1.31102	1.29030	1.24206	1.21196	
November 26 2020	260.21967	1.31108	1.29036	1.24212	1.21202	
November 27 2020	260.23173	1.31114	1.29042	1.24218	1.21207	
November 28 2020	260.24380	1.31120	1.29048	1.24223	1.21213	
November 29 2020	260.25587	1.31126	1.29054	1.24229	1.21219	
November 30 2020	260.26793	1.31132	1.29060	1.24235	1.21224	
CPI-U (NSA) for:	July 2020	259.101	August 2020	259.918	September 2020	260.28

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)
Ref CPI and Index Ratios for
November 2020

Security: Description: CUSIP Number: Dated Date: Original Issue Date: Additional Issue Date(s):			2-1/8% 30-Year TIPS TIPS of February 2040 912810QF8 February 15, 2010 February 26, 2010 August 31, 2010	1-1/8% 10-Year TIPS Series A-2021 912828PP9 January 15, 2011 January 31, 2011 March 31, 2011 May 31, 2011	2-1/8% 30-Year TIPS TIPS of February 2041 912810QP6 February 15, 2011 February 28, 2011 June 30, 2011 October 31, 2011	0-5/8% 10-Year TIPS Series D-2021 912828QV5 July 15, 2011 July 29, 2011 September 30, 2011 November 30, 2011
Maturity Date: Ref CPI on Dated Date:			February 15, 2040 216.13950	January 15, 2021 218.75255	February 15, 2041 218.99100	July 15, 2021 225.38381
Date	Ref CPI	Index Ratio	Index Ratio	Index Ratio	Index Ratio	
November 1 2020	259.91800	1.20255	1.18818	1.18689	1.15322	
November 2 2020	259.93007	1.20260	1.18824	1.18694	1.15328	
November 3 2020	259.94213	1.20266	1.18829	1.18700	1.15333	
November 4 2020	259.95420	1.20271	1.18835	1.18705	1.15338	
November 5 2020	259.96627	1.20277	1.18840	1.18711	1.15344	
November 6 2020	259.97833	1.20283	1.18846	1.18716	1.15349	
November 7 2020	259.99040	1.20288	1.18851	1.18722	1.15355	
November 8 2020	260.00247	1.20294	1.18857	1.18727	1.15360	
November 9 2020	260.01453	1.20299	1.18862	1.18733	1.15365	
November 10 2020	260.02660	1.20305	1.18868	1.18738	1.15371	
November 11 2020	260.03867	1.20311	1.18873	1.18744	1.15376	
November 12 2020	260.05073	1.20316	1.18879	1.18750	1.15381	
November 13 2020	260.06280	1.20322	1.18884	1.18755	1.15387	
November 14 2020	260.07487	1.20327	1.18890	1.18761	1.15392	
November 15 2020	260.08693	1.20333	1.18895	1.18766	1.15397	
November 16 2020	260.09900	1.20338	1.18901	1.18772	1.15403	
November 17 2020	260.11107	1.20344	1.18907	1.18777	1.15408	
November 18 2020	260.12313	1.20350	1.18912	1.18783	1.15413	
November 19 2020	260.13520	1.20355	1.18918	1.18788	1.15419	
November 20 2020	260.14727	1.20361	1.18923	1.18794	1.15424	
November 21 2020	260.15933	1.20366	1.18929	1.18799	1.15429	
November 22 2020	260.17140	1.20372	1.18934	1.18805	1.15435	
November 23 2020	260.18347	1.20378	1.18940	1.18810	1.15440	
November 24 2020	260.19553	1.20383	1.18945	1.18816	1.15446	
November 25 2020	260.20760	1.20389	1.18951	1.18821	1.15451	
November 26 2020	260.21967	1.20394	1.18956	1.18827	1.15456	
November 27 2020	260.23173	1.20400	1.18962	1.18832	1.15462	
November 28 2020	260.24380	1.20405	1.18967	1.18838	1.15467	
November 29 2020	260.25587	1.20411	1.18973	1.18843	1.15472	
November 30 2020	260.26793	1.20417	1.18978	1.18849	1.15478	
CPI-U (NSA) for:	July 2020	259.101	August 2020	259.918	September 2020	260.28

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)
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November 2020

Date			Ref CPI	Index Ratio	Index Ratio	Index Ratio	Index Ratio	
November	1	2020	259.91800	1.14838	1.15028	1.13026	1.12605	
November	2	2020	259.93007	1.14843	1.15033	1.13031	1.12611	
November	3	2020	259.94213	1.14849	1.15039	1.13036	1.12616	
November	4	2020	259.95420	1.14854	1.15044	1.13042	1.12621	
November	5	2020	259.96627	1.14859	1.15049	1.13047	1.12626	
November	6	2020	259.97833	1.14865	1.15055	1.13052	1.12632	
November	7	2020	259.99040	1.14870	1.15060	1.13057	1.12637	
November	8	2020	260.00247	1.14875	1.15065	1.13063	1.12642	
November	9	2020	260.01453	1.14881	1.15071	1.13068	1.12647	
November	10	2020	260.02660	1.14886	1.15076	1.13073	1.12652	
November	11	2020	260.03867	1.14891	1.15081	1.13078	1.12658	
November	12	2020	260.05073	1.14897	1.15087	1.13084	1.12663	
November	13	2020	260.06280	1.14902	1.15092	1.13089	1.12668	
November	14	2020	260.07487	1.14907	1.15097	1.13094	1.12673	
November	15	2020	260.08693	1.14913	1.15103	1.13099	1.12679	
November	16	2020	260.09900	1.14918	1.15108	1.13105	1.12684	
November	17	2020	260.11107	1.14923	1.15113	1.13110	1.12689	
November	18	2020	260.12313	1.14929	1.15119	1.13115	1.12694	
November	19	2020	260.13520	1.14934	1.15124	1.13120	1.12699	
November	20	2020	260.14727	1.14939	1.15129	1.13126	1.12705	
November	21	2020	260.15933	1.14944	1.15135	1.13131	1.12710	
November	22	2020	260.17140	1.14950	1.15140	1.13136	1.12715	
November	23	2020	260.18347	1.14955	1.15145	1.13141	1.12720	
November	24	2020	260.19553	1.14960	1.15151	1.13147	1.12726	
November	25	2020	260.20760	1.14966	1.15156	1.13152	1.12731	
November	26	2020	260.21967	1.14971	1.15162	1.13157	1.12736	
November	27	2020	260.23173	1.14976	1.15167	1.13162	1.12741	
November	28	2020	260.24380	1.14982	1.15172	1.13168	1.12747	
November	29	2020	260.25587	1.14987	1.15178	1.13173	1.12752	
November	30	2020	260.26793	1.14992	1.15183	1.13178	1.12757	
CPI-U (NSA) for:			July 2020	259.101	August 2020	259.918	September 2020	260.28

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)
Ref CPI and Index Ratios for
November 2020

Security: Description: CUSIP Number: Dated Date: Original Issue Date: Additional Issue Date(s):			0-5/8% 30-Year TIPS TIPS of February 2043 912810RA8 February 15, 2013 February 28, 2013 June 28, 2013 October 31, 2013	0-3/8% 10-Year TIPS Series D-2023 912828VM9 July 15, 2013 July 31, 2013 September 30, 2013 November 29, 2013	0-5/8% 10-Year TIPS Series A-2024 912828B25 January 15, 2014 January 31, 2014 March 31, 2014 May 30, 2014	1-3/8% 30-Year TIPS TIPS of February 2044 912810RF7 February 15, 2014 February 28, 2014 June 30, 2014 October 31, 2014
Maturity Date: Ref CPI on Dated Date:			February 15, 2043 229.91100	July 15, 2023 232.71797	January 15, 2024 233.33058	February 15, 2044 233.05900
Date	Ref CPI	Index Ratio	Index Ratio	Index Ratio	Index Ratio	
November 1 2020	259.91800	1.13052	1.11688	1.11395	1.11525	
November 2 2020	259.93007	1.13057	1.11693	1.11400	1.11530	
November 3 2020	259.94213	1.13062	1.11698	1.11405	1.11535	
November 4 2020	259.95420	1.13067	1.11704	1.11410	1.11540	
November 5 2020	259.96627	1.13073	1.11709	1.11415	1.11545	
November 6 2020	259.97833	1.13078	1.11714	1.11421	1.11550	
November 7 2020	259.99040	1.13083	1.11719	1.11426	1.11556	
November 8 2020	260.00247	1.13088	1.11724	1.11431	1.11561	
November 9 2020	260.01453	1.13094	1.11729	1.11436	1.11566	
November 10 2020	260.02660	1.13099	1.11735	1.11441	1.11571	
November 11 2020	260.03867	1.13104	1.11740	1.11446	1.11576	
November 12 2020	260.05073	1.13109	1.11745	1.11452	1.11582	
November 13 2020	260.06280	1.13115	1.11750	1.11457	1.11587	
November 14 2020	260.07487	1.13120	1.11755	1.11462	1.11592	
November 15 2020	260.08693	1.13125	1.11761	1.11467	1.11597	
November 16 2020	260.09900	1.13130	1.11766	1.11472	1.11602	
November 17 2020	260.11107	1.13136	1.11771	1.11477	1.11607	
November 18 2020	260.12313	1.13141	1.11776	1.11483	1.11613	
November 19 2020	260.13520	1.13146	1.11781	1.11488	1.11618	
November 20 2020	260.14727	1.13151	1.11786	1.11493	1.11623	
November 21 2020	260.15933	1.13157	1.11792	1.11498	1.11628	
November 22 2020	260.17140	1.13162	1.11797	1.11503	1.11633	
November 23 2020	260.18347	1.13167	1.11802	1.11509	1.11638	
November 24 2020	260.19553	1.13172	1.11807	1.11514	1.11644	
November 25 2020	260.20760	1.13178	1.11812	1.11519	1.11649	
November 26 2020	260.21967	1.13183	1.11818	1.11524	1.11654	
November 27 2020	260.23173	1.13188	1.11823	1.11529	1.11659	
November 28 2020	260.24380	1.13193	1.11828	1.11534	1.11664	
November 29 2020	260.25587	1.13199	1.11833	1.11540	1.11670	
November 30 2020	260.26793	1.13204	1.11838	1.11545	1.11675	
CPI-U (NSA) for:	July 2020	259.101	August 2020	259.918	September 2020	260.28

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)
Ref CPI and Index Ratios for
November 2020

Security: Description: CUSIP Number: Dated Date: Original Issue Date: Additional Issue Date(s):			0-1/8% 10-Year TIPS Series D-2024 912828WU0 July 15, 2014 July 31, 2014 September 30, 2014 November 28, 2014	0-1/4% 10-Year TIPS Series A-2025 912828H45 January 15, 2015 January 30, 2015 March 31, 2015 May 29, 2015	0-3/4% 30-Year TIPS TIPS of February 2045 912810RL4 February 15, 2015 February 27, 2015 June 30, 2015 October 30, 2015	0-3/8% 10-Year TIPS Series D-2025 912828XL9 July 15, 2015 July 31, 2015 September 30, 2015 November 30, 2015
Maturity Date: Ref CPI on Dated Date:			July 15, 2024 237.44594	January 15, 2025 236.85403	February 15, 2045 235.48150	July 15, 2025 237.14365
Date	Ref CPI	Index Ratio	Index Ratio	Index Ratio	Index Ratio	
November 1 2020	259.91800	1.09464	1.09738	1.10377	1.09604	
November 2 2020	259.93007	1.09469	1.09743	1.10382	1.09609	
November 3 2020	259.94213	1.09474	1.09748	1.10387	1.09614	
November 4 2020	259.95420	1.09479	1.09753	1.10393	1.09619	
November 5 2020	259.96627	1.09484	1.09758	1.10398	1.09624	
November 6 2020	259.97833	1.09489	1.09763	1.10403	1.09629	
November 7 2020	259.99040	1.09495	1.09768	1.10408	1.09634	
November 8 2020	260.00247	1.09500	1.09773	1.10413	1.09639	
November 9 2020	260.01453	1.09505	1.09778	1.10418	1.09644	
November 10 2020	260.02660	1.09510	1.09783	1.10423	1.09649	
November 11 2020	260.03867	1.09515	1.09789	1.10428	1.09654	
November 12 2020	260.05073	1.09520	1.09794	1.10434	1.09660	
November 13 2020	260.06280	1.09525	1.09799	1.10439	1.09665	
November 14 2020	260.07487	1.09530	1.09804	1.10444	1.09670	
November 15 2020	260.08693	1.09535	1.09809	1.10449	1.09675	
November 16 2020	260.09900	1.09540	1.09814	1.10454	1.09680	
November 17 2020	260.11107	1.09545	1.09819	1.10459	1.09685	
November 18 2020	260.12313	1.09550	1.09824	1.10464	1.09690	
November 19 2020	260.13520	1.09556	1.09829	1.10469	1.09695	
November 20 2020	260.14727	1.09561	1.09834	1.10475	1.09700	
November 21 2020	260.15933	1.09566	1.09840	1.10480	1.09705	
November 22 2020	260.17140	1.09571	1.09845	1.10485	1.09710	
November 23 2020	260.18347	1.09576	1.09850	1.10490	1.09716	
November 24 2020	260.19553	1.09581	1.09855	1.10495	1.09721	
November 25 2020	260.20760	1.09586	1.09860	1.10500	1.09726	
November 26 2020	260.21967	1.09591	1.09865	1.10505	1.09731	
November 27 2020	260.23173	1.09596	1.09870	1.10510	1.09736	
November 28 2020	260.24380	1.09601	1.09875	1.10516	1.09741	
November 29 2020	260.25587	1.09606	1.09880	1.10521	1.09746	
November 30 2020	260.26793	1.09611	1.09885	1.10526	1.09751	
CPI-U (NSA) for:	July 2020	259.101	August 2020	259.918	September 2020	260.28

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Ref CPI and Index Ratios for
November 2020

Security: Description: CUSIP Number: Dated Date: Original Issue Date: Additional Issue Date(s):			0-5/8% 10-Year TIPS Series A-2026 912828N71 January 15, 2016 January 29, 2016 March 31, 2016 May 31, 2016	1% 30-Year TIPS TIPS of February 2046 912810RR1 February 15, 2016 February 29, 2016 June 30, 2016 October 31, 2016	0-1/8% 5-Year TIPS Series X-2021 912828Q60 April 15, 2016 April 29, 2016 August 31, 2016 December 30, 2016	0-1/8% 10-Year TIPS Series D-2026 912828S50 July 15, 2016 July 29, 2016 September 30, 2016 November 30, 2016
Maturity Date: Ref CPI on Dated Date:			January 15, 2026 237.61129	February 15, 2046 236.94448	April 15, 2021 237.00700	July 15, 2026 239.70132
Date	Ref CPI	Index Ratio	Index Ratio	Index Ratio	Index Ratio	
November 1 2020	259.91800	1.09388	1.09696	1.09667	1.08434	
November 2 2020	259.93007	1.09393	1.09701	1.09672	1.08439	
November 3 2020	259.94213	1.09398	1.09706	1.09677	1.08444	
November 4 2020	259.95420	1.09403	1.09711	1.09682	1.08449	
November 5 2020	259.96627	1.09408	1.09716	1.09687	1.08454	
November 6 2020	259.97833	1.09413	1.09721	1.09692	1.08459	
November 7 2020	259.99040	1.09418	1.09726	1.09697	1.08464	
November 8 2020	260.00247	1.09423	1.09731	1.09702	1.08469	
November 9 2020	260.01453	1.09429	1.09736	1.09708	1.08474	
November 10 2020	260.02660	1.09434	1.09742	1.09713	1.08479	
November 11 2020	260.03867	1.09439	1.09747	1.09718	1.08484	
November 12 2020	260.05073	1.09444	1.09752	1.09723	1.08489	
November 13 2020	260.06280	1.09449	1.09757	1.09728	1.08495	
November 14 2020	260.07487	1.09454	1.09762	1.09733	1.08500	
November 15 2020	260.08693	1.09459	1.09767	1.09738	1.08505	
November 16 2020	260.09900	1.09464	1.09772	1.09743	1.08510	
November 17 2020	260.11107	1.09469	1.09777	1.09748	1.08515	
November 18 2020	260.12313	1.09474	1.09782	1.09753	1.08520	
November 19 2020	260.13520	1.09479	1.09787	1.09758	1.08525	
November 20 2020	260.14727	1.09484	1.09793	1.09764	1.08530	
November 21 2020	260.15933	1.09489	1.09798	1.09769	1.08535	
November 22 2020	260.17140	1.09495	1.09803	1.09774	1.08540	
November 23 2020	260.18347	1.09500	1.09808	1.09779	1.08545	
November 24 2020	260.19553	1.09505	1.09813	1.09784	1.08550	
November 25 2020	260.20760	1.09510	1.09818	1.09789	1.08555	
November 26 2020	260.21967	1.09515	1.09823	1.09794	1.08560	
November 27 2020	260.23173	1.09520	1.09828	1.09799	1.08565	
November 28 2020	260.24380	1.09525	1.09833	1.09804	1.08570	
November 29 2020	260.25587	1.09530	1.09838	1.09809	1.08575	
November 30 2020	260.26793	1.09535	1.09843	1.09814	1.08580	
CPI-U (NSA) for:	July 2020	259.101	August 2020	259.918	September 2020	260.28

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)
Ref CPI and Index Ratios for
November 2020

Date			Ref CPI	Index Ratio	Index Ratio	Index Ratio	Index Ratio	
November	1	2020	259.91800	1.07600	1.07674	1.06876	1.06254	
November	2	2020	259.93007	1.07605	1.07679	1.06881	1.06259	
November	3	2020	259.94213	1.07610	1.07684	1.06886	1.06264	
November	4	2020	259.95420	1.07615	1.07689	1.06891	1.06269	
November	5	2020	259.96627	1.07620	1.07694	1.06896	1.06274	
November	6	2020	259.97833	1.07625	1.07699	1.06901	1.06279	
November	7	2020	259.99040	1.07630	1.07704	1.06906	1.06284	
November	8	2020	260.00247	1.07635	1.07709	1.06911	1.06289	
November	9	2020	260.01453	1.07640	1.07714	1.06916	1.06294	
November	10	2020	260.02660	1.07645	1.07719	1.06921	1.06299	
November	11	2020	260.03867	1.07650	1.07724	1.06926	1.06304	
November	12	2020	260.05073	1.07655	1.07729	1.06931	1.06309	
November	13	2020	260.06280	1.07660	1.07734	1.06936	1.06314	
November	14	2020	260.07487	1.07665	1.07739	1.06941	1.06319	
November	15	2020	260.08693	1.07670	1.07744	1.06946	1.06324	
November	16	2020	260.09900	1.07675	1.07749	1.06951	1.06328	
November	17	2020	260.11107	1.07680	1.07754	1.06956	1.06333	
November	18	2020	260.12313	1.07685	1.07759	1.06960	1.06338	
November	19	2020	260.13520	1.07690	1.07764	1.06965	1.06343	
November	20	2020	260.14727	1.07695	1.07769	1.06970	1.06348	
November	21	2020	260.15933	1.07700	1.07774	1.06975	1.06353	
November	22	2020	260.17140	1.07705	1.07779	1.06980	1.06358	
November	23	2020	260.18347	1.07710	1.07784	1.06985	1.06363	
November	24	2020	260.19553	1.07715	1.07789	1.06990	1.06368	
November	25	2020	260.20760	1.07720	1.07794	1.06995	1.06373	
November	26	2020	260.21967	1.07725	1.07799	1.07000	1.06378	
November	27	2020	260.23173	1.07730	1.07804	1.07005	1.06383	
November	28	2020	260.24380	1.07735	1.07809	1.07010	1.06388	
November	29	2020	260.25587	1.07740	1.07814	1.07015	1.06393	
November	30	2020	260.26793	1.07745	1.07819	1.07020	1.06398	
CPI-U (NSA) for:			July 2020	259.101	August 2020	259.918	September 2020	260.28

Security:	0-3/8% 10-Year TIPS	0-7/8% 30-Year TIPS	0-1/8% 5-Year TIPS	0-3/8% 10-Year TIPS
Description:	Series A-2027	TIPS of February 2047	Series X-2022	Series D-2027
CUSIP Number:	912828V49	912810RW0	912828X39	912828L3
Dated Date:	January 15, 2017	February 15, 2017	April 15, 2017	July 15, 2017
Original Issue Date:	January 31, 2017	February 28, 2017	April 28, 2017	July 31, 2017
Additional Issue Date(s):	March 31, 2017 May 31, 2017	June 30, 2017 October 31, 2017	August 31, 2017 December 29, 2017	September 29, 2017 November 30, 2017
Maturity Date:	January 15, 2027	February 15, 2047	April 15, 2022	July 15, 2027
Ref CPI on Dated Date:	241.55919	241.39250	243.19553	244.61839

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)
Ref CPI and Index Ratios for
November 2020

Security: Description: CUSIP Number: Dated Date: Original Issue Date: Additional Issue Date(s):			0-1/2% 10-Year TIPS Series A-2028 9128283R9 January 15, 2018 January 31, 2018 March 29, 2018 May 31, 2018	1% 30-Year TIPS TIPS of February 2048 912810SB5 February 15, 2018 February 28, 2018 June 29, 2018 October 31, 2018	0-5/8% 5-Year TIPS Series X-2023 9128284H0 April 15, 2018 April 30, 2018 August 31, 2018 December 31, 2018	0-3/4% 10-Year TIPS Series D-2028 912828Y38 July 15, 2018 July 31, 2018 September 28, 2018 November 30, 2018
Maturity Date: Ref CPI on Dated Date:			January 15, 2028 246.66571	February 15, 2048 246.59650	April 15, 2023 248.39153	July 15, 2028 251.01658
Date	Ref CPI	Index Ratio	Index Ratio	Index Ratio	Index Ratio	
November 1 2020	259.91800	1.05373	1.05402	1.04640	1.03546	
November 2 2020	259.93007	1.05377	1.05407	1.04645	1.03551	
November 3 2020	259.94213	1.05382	1.05412	1.04650	1.03556	
November 4 2020	259.95420	1.05387	1.05417	1.04655	1.03561	
November 5 2020	259.96627	1.05392	1.05422	1.04660	1.03565	
November 6 2020	259.97833	1.05397	1.05427	1.04665	1.03570	
November 7 2020	259.99040	1.05402	1.05432	1.04670	1.03575	
November 8 2020	260.00247	1.05407	1.05436	1.04674	1.03580	
November 9 2020	260.01453	1.05412	1.05441	1.04679	1.03585	
November 10 2020	260.02660	1.05417	1.05446	1.04684	1.03589	
November 11 2020	260.03867	1.05421	1.05451	1.04689	1.03594	
November 12 2020	260.05073	1.05426	1.05456	1.04694	1.03599	
November 13 2020	260.06280	1.05431	1.05461	1.04699	1.03604	
November 14 2020	260.07487	1.05436	1.05466	1.04704	1.03609	
November 15 2020	260.08693	1.05441	1.05471	1.04708	1.03613	
November 16 2020	260.09900	1.05446	1.05476	1.04713	1.03618	
November 17 2020	260.11107	1.05451	1.05480	1.04718	1.03623	
November 18 2020	260.12313	1.05456	1.05485	1.04723	1.03628	
November 19 2020	260.13520	1.05461	1.05490	1.04728	1.03633	
November 20 2020	260.14727	1.05466	1.05495	1.04733	1.03637	
November 21 2020	260.15933	1.05470	1.05500	1.04738	1.03642	
November 22 2020	260.17140	1.05475	1.05505	1.04742	1.03647	
November 23 2020	260.18347	1.05480	1.05510	1.04747	1.03652	
November 24 2020	260.19553	1.05485	1.05515	1.04752	1.03657	
November 25 2020	260.20760	1.05490	1.05520	1.04757	1.03662	
November 26 2020	260.21967	1.05495	1.05524	1.04762	1.03666	
November 27 2020	260.23173	1.05500	1.05529	1.04767	1.03671	
November 28 2020	260.24380	1.05505	1.05534	1.04772	1.03676	
November 29 2020	260.25587	1.05510	1.05539	1.04776	1.03681	
November 30 2020	260.26793	1.05514	1.05544	1.04781	1.03686	
CPI-U (NSA) for:	July 2020	259.101	August 2020	259.918	September 2020	260.28

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)
Ref CPI and Index Ratios for
November 2020

Security:			0-7/8% 10-Year TIPS	1% 30-Year TIPS	0-1/2% 5-Year TIPS	0-1/4% 10-Year TIPS		
Description:			Series A-2029	TIPS of February 2049	Series X-2024	Series D-2029		
CUSIP Number:			9128285W6	912810SG4	9128286N5	9128287D6		
Dated Date:			January 15, 2019	February 15, 2019	April 15, 2019	July 15, 2019		
Original Issue Date:			January 31, 2019	February 28, 2019	April 30, 2019	July 31, 2019		
Additional Issue Date(s):			March 29, 2019	August 30, 2019	June 28, 2019	September 30, 2019		
			May 31, 2019			November 29, 2019		
Maturity Date:			January 15, 2029	February 15, 2049	April 15, 2024	July 15, 2029		
Ref CPI on Dated Date:			252.50248	251.63550	252.20853	255.79368		
Date			Ref CPI	Index Ratio	Index Ratio	Index Ratio		
November	1	2020	259.91800	1.02937	1.03291	1.03057	1.01612	
November	2	2020	259.93007	1.02942	1.03296	1.03062	1.01617	
November	3	2020	259.94213	1.02946	1.03301	1.03066	1.01622	
November	4	2020	259.95420	1.02951	1.03306	1.03071	1.01627	
November	5	2020	259.96627	1.02956	1.03311	1.03076	1.01631	
November	6	2020	259.97833	1.02961	1.03315	1.03081	1.01636	
November	7	2020	259.99040	1.02965	1.03320	1.03085	1.01641	
November	8	2020	260.00247	1.02970	1.03325	1.03090	1.01645	
November	9	2020	260.01453	1.02975	1.03330	1.03095	1.01650	
November	10	2020	260.02660	1.02980	1.03335	1.03100	1.01655	
November	11	2020	260.03867	1.02985	1.03339	1.03105	1.01660	
November	12	2020	260.05073	1.02989	1.03344	1.03109	1.01664	
November	13	2020	260.06280	1.02994	1.03349	1.03114	1.01669	
November	14	2020	260.07487	1.02999	1.03354	1.03119	1.01674	
November	15	2020	260.08693	1.03004	1.03359	1.03124	1.01678	
November	16	2020	260.09900	1.03008	1.03363	1.03129	1.01683	
November	17	2020	260.11107	1.03013	1.03368	1.03133	1.01688	
November	18	2020	260.12313	1.03018	1.03373	1.03138	1.01693	
November	19	2020	260.13520	1.03023	1.03378	1.03143	1.01697	
November	20	2020	260.14727	1.03028	1.03383	1.03148	1.01702	
November	21	2020	260.15933	1.03032	1.03387	1.03152	1.01707	
November	22	2020	260.17140	1.03037	1.03392	1.03157	1.01711	
November	23	2020	260.18347	1.03042	1.03397	1.03162	1.01716	
November	24	2020	260.19553	1.03047	1.03402	1.03167	1.01721	
November	25	2020	260.20760	1.03052	1.03407	1.03172	1.01726	
November	26	2020	260.21967	1.03056	1.03411	1.03176	1.01730	
November	27	2020	260.23173	1.03061	1.03416	1.03181	1.01735	
November	28	2020	260.24380	1.03066	1.03421	1.03186	1.01740	
November	29	2020	260.25587	1.03071	1.03426	1.03191	1.01744	
November	30	2020	260.26793	1.03075	1.03431	1.03196	1.01749	
CPI-U (NSA) for:			July 2020	259.101	August 2020	259.918	September 2020	260.28

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)
Ref CPI and Index Ratios for
November 2020

Security: Description: CUSIP Number: Dated Date: Original Issue Date: Additional Issue Date(s):			0-1/8% 5-Year TIPS Series AE-2024 912828YL8 October 15, 2019 October 31, 2019 December 31, 2019	0-1/8% 10-Year TIPS Series A-2030 912828ZL37 January 15, 2020 January 31, 2020 March 31, 2020 May 29, 2020	0-1/4% 30-Year TIPS TIPS of February 2050 912810SM1 February 15, 2020 February 28, 2020 August 31, 2020	0-1/8% 5-Year TIPS Series X-2025 912828ZJ2 April 15, 2020 April 30, 2020 June 30, 2020 July 13, 2020
Maturity Date: Ref CPI on Dated Date:			October 15, 2024 256.56513	January 15, 2030 257.28368	February 15, 2050 257.09503	April 15, 2025 258.30093
Date	Ref CPI	Index Ratio	Index Ratio	Index Ratio	Index Ratio	
November 1 2020	259.91800	1.01307	1.01024	1.01098	1.00626	
November 2 2020	259.93007	1.01312	1.01029	1.01103	1.00631	
November 3 2020	259.94213	1.01316	1.01033	1.01107	1.00635	
November 4 2020	259.95420	1.01321	1.01038	1.01112	1.00640	
November 5 2020	259.96627	1.01326	1.01043	1.01117	1.00645	
November 6 2020	259.97833	1.01330	1.01047	1.01121	1.00649	
November 7 2020	259.99040	1.01335	1.01052	1.01126	1.00654	
November 8 2020	260.00247	1.01340	1.01057	1.01131	1.00659	
November 9 2020	260.01453	1.01344	1.01061	1.01136	1.00663	
November 10 2020	260.02660	1.01349	1.01066	1.01140	1.00668	
November 11 2020	260.03867	1.01354	1.01071	1.01145	1.00673	
November 12 2020	260.05073	1.01359	1.01075	1.01150	1.00677	
November 13 2020	260.06280	1.01363	1.01080	1.01154	1.00682	
November 14 2020	260.07487	1.01368	1.01085	1.01159	1.00687	
November 15 2020	260.08693	1.01373	1.01090	1.01164	1.00691	
November 16 2020	260.09900	1.01377	1.01094	1.01168	1.00696	
November 17 2020	260.11107	1.01382	1.01099	1.01173	1.00701	
November 18 2020	260.12313	1.01387	1.01104	1.01178	1.00705	
November 19 2020	260.13520	1.01391	1.01108	1.01183	1.00710	
November 20 2020	260.14727	1.01396	1.01113	1.01187	1.00715	
November 21 2020	260.15933	1.01401	1.01118	1.01192	1.00719	
November 22 2020	260.17140	1.01406	1.01122	1.01197	1.00724	
November 23 2020	260.18347	1.01410	1.01127	1.01201	1.00729	
November 24 2020	260.19553	1.01415	1.01132	1.01206	1.00733	
November 25 2020	260.20760	1.01420	1.01136	1.01211	1.00738	
November 26 2020	260.21967	1.01424	1.01141	1.01215	1.00743	
November 27 2020	260.23173	1.01429	1.01146	1.01220	1.00748	
November 28 2020	260.24380	1.01434	1.01151	1.01225	1.00752	
November 29 2020	260.25587	1.01439	1.01155	1.01229	1.00757	
November 30 2020	260.26793	1.01443	1.01160	1.01234	1.00762	
CPI-U (NSA) for:	July 2020	259.101	August 2020	259.918	September 2020	260.28

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)
Ref CPI and Index Ratios for
November 2020

Security: Description: CUSIP Number: Dated Date: Original Issue Date: Additional Issue Date(s): Maturity Date: Ref CPI on Dated Date:			0-1/8% 10-Year TIPS Series D-2030 912828ZZ6 July 15, 2020 July 31, 2020 September 30, 2020 July 15, 2030 256.39126					
Date			Ref CPI	Index Ratio				
November	1	2020	259.91800	1.01376				
November	2	2020	259.93007	1.01380				
November	3	2020	259.94213	1.01385				
November	4	2020	259.95420	1.01390				
November	5	2020	259.96627	1.01394				
November	6	2020	259.97833	1.01399				
November	7	2020	259.99040	1.01404				
November	8	2020	260.00247	1.01408				
November	9	2020	260.01453	1.01413				
November	10	2020	260.02660	1.01418				
November	11	2020	260.03867	1.01423				
November	12	2020	260.05073	1.01427				
November	13	2020	260.06280	1.01432				
November	14	2020	260.07487	1.01437				
November	15	2020	260.08693	1.01441				
November	16	2020	260.09900	1.01446				
November	17	2020	260.11107	1.01451				
November	18	2020	260.12313	1.01456				
November	19	2020	260.13520	1.01460				
November	20	2020	260.14727	1.01465				
November	21	2020	260.15933	1.01470				
November	22	2020	260.17140	1.01474				
November	23	2020	260.18347	1.01479				
November	24	2020	260.19553	1.01484				
November	25	2020	260.20760	1.01488				
November	26	2020	260.21967	1.01493				
November	27	2020	260.23173	1.01498				
November	28	2020	260.24380	1.01503				
November	29	2020	260.25587	1.01507				
November	30	2020	260.26793	1.01512				
CPI-U (NSA) for:			July 2020	259.101	August 2020	259.918	September 2020	260.28