

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)
Ref CPI and Index Ratios for
July 2017

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	
July 1 2017	244.52400	1.51183	1.48743	1.37760	1.29723	
July 2 2017	244.53074	1.51188	1.48747	1.37764	1.29727	
July 3 2017	244.53748	1.51192	1.48751	1.37768	1.29730	
July 4 2017	244.54423	1.51196	1.48756	1.37771	1.29734	
July 5 2017	244.55097	1.51200	1.48760	1.37775	1.29737	
July 6 2017	244.55771	1.51204	1.48764	1.37779	1.29741	
July 7 2017	244.56445	1.51208	1.48768	1.37783	1.29745	
July 8 2017	244.57119	1.51213	1.48772	1.37787	1.29748	
July 9 2017	244.57794	1.51217	1.48776	1.37790	1.29752	
July 10 2017	244.58468	1.51221	1.48780	1.37794	1.29755	
July 11 2017	244.59142	1.51225	1.48784	1.37798	1.29759	
July 12 2017	244.59816	1.51229	1.48788	1.37802	1.29763	
July 13 2017	244.60490	1.51233	1.48792	1.37806	1.29766	
July 14 2017	244.61165	1.51238	1.48797	1.37809	1.29770	
July 15 2017	244.61839	1.51242	1.48801	1.37813	1.29773	
July 16 2017	244.62513	1.51246	1.48805	1.37817	1.29777	
July 17 2017	244.63187	1.51250	1.48809	1.37821	1.29780	
July 18 2017	244.63861	1.51254	1.48813	1.37825	1.29784	
July 19 2017	244.64535	1.51258	1.48817	1.37828	1.29788	
July 20 2017	244.65210	1.51263	1.48821	1.37832	1.29791	
July 21 2017	244.65884	1.51267	1.48825	1.37836	1.29795	
July 22 2017	244.66558	1.51271	1.48829	1.37840	1.29798	
July 23 2017	244.67232	1.51275	1.48833	1.37844	1.29802	
July 24 2017	244.67906	1.51279	1.48838	1.37847	1.29805	
July 25 2017	244.68581	1.51283	1.48842	1.37851	1.29809	
July 26 2017	244.69255	1.51288	1.48846	1.37855	1.29813	
July 27 2017	244.69929	1.51292	1.48850	1.37859	1.29816	
July 28 2017	244.70603	1.51296	1.48854	1.37863	1.29820	
July 29 2017	244.71277	1.51300	1.48858	1.37866	1.29823	
July 30 2017	244.71952	1.51304	1.48862	1.37870	1.29827	
July 31 2017	244.72626	1.51308	1.48866	1.37874	1.29830	
CPI-U (NSA) for:			March 2017 243.801	April 2017 244.524	May 2017 244.733	

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)
Ref CPI and Index Ratios for
July 2017

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	2-5/8% 10-Year TIPS Series D-2017 912828GX2 July 15, 2007 July 16, 2007 October 15, 2007	1-5/8% 10-Year TIPS Series A-2018 912828HN3 January 15, 2008 January 15, 2008 April 15, 2008
Maturity Date: Ref CPI on Dated Date:			January 15, 2026 198.47742	January 15, 2027 201.66452	July 15, 2017 207.25639	January 15, 2018 209.49645
Date	Ref CPI	Index Ratio	Index Ratio	Index Ratio	Index Ratio	
July 1 2017	244.52400	1.23200	1.21253	1.17981	1.16720	
July 2 2017	244.53074	1.23203	1.21256	1.17985	1.16723	
July 3 2017	244.53748	1.23207	1.21260	1.17988	1.16726	
July 4 2017	244.54423	1.23210	1.21263	1.17991	1.16730	
July 5 2017	244.55097	1.23213	1.21266	1.17994	1.16733	
July 6 2017	244.55771	1.23217	1.21270	1.17998	1.16736	
July 7 2017	244.56445	1.23220	1.21273	1.18001	1.16739	
July 8 2017	244.57119	1.23224	1.21276	1.18004	1.16742	
July 9 2017	244.57794	1.23227	1.21280	1.18007	1.16746	
July 10 2017	244.58468	1.23230	1.21283	1.18011	1.16749	
July 11 2017	244.59142	1.23234	1.21286	1.18014	1.16752	
July 12 2017	244.59816	1.23237	1.21290	1.18017	1.16755	
July 13 2017	244.60490	1.23241	1.21293	1.18020	1.16758	
July 14 2017	244.61165	1.23244	1.21296	1.18024	1.16762	
July 15 2017	244.61839	1.23247	1.21300	1.18027	1.16765	
July 16 2017	244.62513	1.23251	1.21303		1.16768	
July 17 2017	244.63187	1.23254	1.21306		1.16771	
July 18 2017	244.63861	1.23258	1.21310		1.16775	
July 19 2017	244.64535	1.23261	1.21313		1.16778	
July 20 2017	244.65210	1.23264	1.21316		1.16781	
July 21 2017	244.65884	1.23268	1.21320		1.16784	
July 22 2017	244.66558	1.23271	1.21323		1.16787	
July 23 2017	244.67232	1.23275	1.21326		1.16791	
July 24 2017	244.67906	1.23278	1.21330		1.16794	
July 25 2017	244.68581	1.23281	1.21333		1.16797	
July 26 2017	244.69255	1.23285	1.21336		1.16800	
July 27 2017	244.69929	1.23288	1.21340		1.16804	
July 28 2017	244.70603	1.23292	1.21343		1.16807	
July 29 2017	244.71277	1.23295	1.21346		1.16810	
July 30 2017	244.71952	1.23298	1.21350		1.16813	
July 31 2017	244.72626	1.23302	1.21353		1.16816	
CPI-U (NSA) for:	March 2017	243.801	April 2017	244.524	May 2017	244.733

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)
Ref CPI and Index Ratios for
July 2017

Security: Description: CUSIP Number: Dated Date: Original Issue Date: Additional Issue Date(s):			1-3/4% 20-Year TIPS TIPS of January 2028 912810PV4 January 15, 2008 January 31, 2008 July 31, 2008	1-3/8% 10-Year TIPS Series D-2018 912828JE1 July 15, 2008 July 15, 2008 October 15, 2008	2-1/8% 10-Year TIPS Series A-2019 912828JX9 January 15, 2009 January 15, 2009 April 15, 2009	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, 2028 209.49645	July 15, 2018 215.63997	January 15, 2019 214.69971	January 15, 2029 214.69971		
Date	Ref CPI	Index Ratio	Index Ratio	Index Ratio	Index Ratio			
July 1 2017	244.52400	1.16720	1.13395	1.13891	1.13891			
July 2 2017	244.53074	1.16723	1.13398	1.13894	1.13894			
July 3 2017	244.53748	1.16726	1.13401	1.13897	1.13897			
July 4 2017	244.54423	1.16730	1.13404	1.13901	1.13901			
July 5 2017	244.55097	1.16733	1.13407	1.13904	1.13904			
July 6 2017	244.55771	1.16736	1.13410	1.13907	1.13907			
July 7 2017	244.56445	1.16739	1.13413	1.13910	1.13910			
July 8 2017	244.57119	1.16742	1.13416	1.13913	1.13913			
July 9 2017	244.57794	1.16746	1.13420	1.13916	1.13916			
July 10 2017	244.58468	1.16749	1.13423	1.13919	1.13919			
July 11 2017	244.59142	1.16752	1.13426	1.13923	1.13923			
July 12 2017	244.59816	1.16755	1.13429	1.13926	1.13926			
July 13 2017	244.60490	1.16758	1.13432	1.13929	1.13929			
July 14 2017	244.61165	1.16762	1.13435	1.13932	1.13932			
July 15 2017	244.61839	1.16765	1.13438	1.13935	1.13935			
July 16 2017	244.62513	1.16768	1.13441	1.13938	1.13938			
July 17 2017	244.63187	1.16771	1.13445	1.13941	1.13941			
July 18 2017	244.63861	1.16775	1.13448	1.13945	1.13945			
July 19 2017	244.64535	1.16778	1.13451	1.13948	1.13948			
July 20 2017	244.65210	1.16781	1.13454	1.13951	1.13951			
July 21 2017	244.65884	1.16784	1.13457	1.13954	1.13954			
July 22 2017	244.66558	1.16787	1.13460	1.13957	1.13957			
July 23 2017	244.67232	1.16791	1.13463	1.13960	1.13960			
July 24 2017	244.67906	1.16794	1.13466	1.13963	1.13963			
July 25 2017	244.68581	1.16797	1.13470	1.13967	1.13967			
July 26 2017	244.69255	1.16800	1.13473	1.13970	1.13970			
July 27 2017	244.69929	1.16804	1.13476	1.13973	1.13973			
July 28 2017	244.70603	1.16807	1.13479	1.13976	1.13976			
July 29 2017	244.71277	1.16810	1.13482	1.13979	1.13979			
July 30 2017	244.71952	1.16813	1.13485	1.13982	1.13982			
July 31 2017	244.72626	1.16816	1.13488	1.13985	1.13985			
CPI-U (NSA) for:			March 2017	243.801	April 2017	244.524	May 2017	244.733

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)
Ref CPI and Index Ratios for
July 2017

Date			Ref CPI	Index Ratio	Index Ratio	Index Ratio	Index Ratio	
July	1	2017	244.52400	1.14521	1.13077	1.13132	1.12123	
July	2	2017	244.53074	1.14525	1.13080	1.13136	1.12126	
July	3	2017	244.53748	1.14528	1.13083	1.13139	1.12129	
July	4	2017	244.54423	1.14531	1.13086	1.13142	1.12132	
July	5	2017	244.55097	1.14534	1.13089	1.13145	1.12135	
July	6	2017	244.55771	1.14537	1.13092	1.13148	1.12139	
July	7	2017	244.56445	1.14540	1.13095	1.13151	1.12142	
July	8	2017	244.57119	1.14543	1.13099	1.13154	1.12145	
July	9	2017	244.57794	1.14547	1.13102	1.13157	1.12148	
July	10	2017	244.58468	1.14550	1.13105	1.13161	1.12151	
July	11	2017	244.59142	1.14553	1.13108	1.13164	1.12154	
July	12	2017	244.59816	1.14556	1.13111	1.13167	1.12157	
July	13	2017	244.60490	1.14559	1.13114	1.13170	1.12160	
July	14	2017	244.61165	1.14562	1.13117	1.13173	1.12163	
July	15	2017	244.61839	1.14566	1.13120	1.13176	1.12166	
July	16	2017	244.62513	1.14569	1.13123	1.13179	1.12169	
July	17	2017	244.63187	1.14572	1.13127	1.13182	1.12173	
July	18	2017	244.63861	1.14575	1.13130	1.13186	1.12176	
July	19	2017	244.64535	1.14578	1.13133	1.13189	1.12179	
July	20	2017	244.65210	1.14581	1.13136	1.13192	1.12182	
July	21	2017	244.65884	1.14585	1.13139	1.13195	1.12185	
July	22	2017	244.66558	1.14588	1.13142	1.13198	1.12188	
July	23	2017	244.67232	1.14591	1.13145	1.13201	1.12191	
July	24	2017	244.67906	1.14594	1.13148	1.13204	1.12194	
July	25	2017	244.68581	1.14597	1.13152	1.13207	1.12197	
July	26	2017	244.69255	1.14600	1.13155	1.13210	1.12200	
July	27	2017	244.69929	1.14603	1.13158	1.13214	1.12203	
July	28	2017	244.70603	1.14607	1.13161	1.13217	1.12207	
July	29	2017	244.71277	1.14610	1.13164	1.13220	1.12210	
July	30	2017	244.71952	1.14613	1.13167	1.13223	1.12213	
July	31	2017	244.72626	1.14616	1.13170	1.13226	1.12216	
CPI-U (NSA) for:			March 2017	243.801	April 2017	244.524	May 2017	244.733

Security:	1-7/8% 10-Year TIPS	1-3/8% 10-Year TIPS	2-1/8% 30-Year TIPS	1-1/4% 10-Year TIPS
Description:	Series D-2019	Series A-2020	TIPS of February 2040	Series D-2020
CUSIP Number:	912828LA6	912828MF4	912810QF8	912828NM8
Dated Date:	July 15, 2009	January 15, 2010	February 15, 2010	July 15, 2010
Original Issue Date:	July 15, 2009	January 15, 2010	February 26, 2010	July 15, 2010
Additional Issue Date(s):	October 15, 2009	April 15, 2010	August 31, 2010	September 15, 2010
				November 15, 2010
Maturity Date:	July 15, 2019	January 15, 2020	February 15, 2040	July 15, 2020
Ref CPI on Dated Date:	213.51819	216.24610	216.13950	218.08532

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)
Ref CPI and Index Ratios for
July 2017

Date			Ref CPI	Index Ratio	Index Ratio	Index Ratio	Index Ratio	
July	1	2017	244.52400	1.11781	1.11659	1.08492	1.08036	
July	2	2017	244.53074	1.11784	1.11662	1.08495	1.08039	
July	3	2017	244.53748	1.11787	1.11666	1.08498	1.08042	
July	4	2017	244.54423	1.11790	1.11669	1.08501	1.08045	
July	5	2017	244.55097	1.11793	1.11672	1.08504	1.08048	
July	6	2017	244.55771	1.11797	1.11675	1.08507	1.08051	
July	7	2017	244.56445	1.11800	1.11678	1.08510	1.08054	
July	8	2017	244.57119	1.11803	1.11681	1.08513	1.08057	
July	9	2017	244.57794	1.11806	1.11684	1.08516	1.08060	
July	10	2017	244.58468	1.11809	1.11687	1.08519	1.08063	
July	11	2017	244.59142	1.11812	1.11690	1.08522	1.08066	
July	12	2017	244.59816	1.11815	1.11693	1.08525	1.08069	
July	13	2017	244.60490	1.11818	1.11696	1.08528	1.08072	
July	14	2017	244.61165	1.11821	1.11699	1.08531	1.08075	
July	15	2017	244.61839	1.11824	1.11702	1.08534	1.08078	
July	16	2017	244.62513	1.11827	1.11706	1.08537	1.08081	
July	17	2017	244.63187	1.11830	1.11709	1.08540	1.08084	
July	18	2017	244.63861	1.11833	1.11712	1.08543	1.08087	
July	19	2017	244.64535	1.11837	1.11715	1.08546	1.08090	
July	20	2017	244.65210	1.11840	1.11718	1.08549	1.08093	
July	21	2017	244.65884	1.11843	1.11721	1.08552	1.08096	
July	22	2017	244.66558	1.11846	1.11724	1.08555	1.08099	
July	23	2017	244.67232	1.11849	1.11727	1.08558	1.08102	
July	24	2017	244.67906	1.11852	1.11730	1.08561	1.08105	
July	25	2017	244.68581	1.11855	1.11733	1.08564	1.08108	
July	26	2017	244.69255	1.11858	1.11736	1.08567	1.08111	
July	27	2017	244.69929	1.11861	1.11739	1.08570	1.08114	
July	28	2017	244.70603	1.11864	1.11743	1.08573	1.08117	
July	29	2017	244.71277	1.11867	1.11746	1.08576	1.08120	
July	30	2017	244.71952	1.11870	1.11749	1.08579	1.08123	
July	31	2017	244.72626	1.11874	1.11752	1.08582	1.08126	
CPI-U (NSA) for:			March 2017	243.801	April 2017	244.524	May 2017	244.733

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)
Ref CPI and Index Ratios for
July 2017

Security: Description: CUSIP Number: Dated Date: Original Issue Date: Additional Issue Date(s):			0-3/4% 30-Year TIPS TIPS of February 2042 912810QV3 February 15, 2012 February 29, 2012 June 29, 2012 October 31, 2012	0-1/8% 10-Year TIPS Series D-2022 912828TE0 July 15, 2012 July 31, 2012 September 28, 2012 November 30, 2012	0-1/8% 10-Year TIPS Series A-2023 912828UH1 January 15, 2013 January 31, 2013 March 28, 2013 May 31, 2013	0-5/8% 30-Year TIPS TIPS of February 2043 912810RA8 February 15, 2013 February 28, 2013 June 28, 2013 October 31, 2013
Maturity Date: Ref CPI on Dated Date:			February 15, 2042 225.96062	July 15, 2022 229.96306	January 15, 2023 230.82203	February 15, 2043 229.91100
Date	Ref CPI	Index Ratio	Index Ratio	Index Ratio	Index Ratio	
July 1 2017	244.52400	1.08215	1.06332	1.05936	1.06356	
July 2 2017	244.53074	1.08218	1.06335	1.05939	1.06359	
July 3 2017	244.53748	1.08221	1.06338	1.05942	1.06362	
July 4 2017	244.54423	1.08224	1.06341	1.05945	1.06365	
July 5 2017	244.55097	1.08227	1.06344	1.05948	1.06368	
July 6 2017	244.55771	1.08230	1.06347	1.05951	1.06371	
July 7 2017	244.56445	1.08233	1.06349	1.05954	1.06374	
July 8 2017	244.57119	1.08236	1.06352	1.05957	1.06376	
July 9 2017	244.57794	1.08239	1.06355	1.05960	1.06379	
July 10 2017	244.58468	1.08242	1.06358	1.05962	1.06382	
July 11 2017	244.59142	1.08245	1.06361	1.05965	1.06385	
July 12 2017	244.59816	1.08248	1.06364	1.05968	1.06388	
July 13 2017	244.60490	1.08251	1.06367	1.05971	1.06391	
July 14 2017	244.61165	1.08254	1.06370	1.05974	1.06394	
July 15 2017	244.61839	1.08257	1.06373	1.05977	1.06397	
July 16 2017	244.62513	1.08260	1.06376	1.05980	1.06400	
July 17 2017	244.63187	1.08263	1.06379	1.05983	1.06403	
July 18 2017	244.63861	1.08266	1.06382	1.05986	1.06406	
July 19 2017	244.64535	1.08269	1.06385	1.05989	1.06409	
July 20 2017	244.65210	1.08272	1.06388	1.05992	1.06412	
July 21 2017	244.65884	1.08275	1.06390	1.05995	1.06415	
July 22 2017	244.66558	1.08278	1.06393	1.05997	1.06418	
July 23 2017	244.67232	1.08281	1.06396	1.06000	1.06420	
July 24 2017	244.67906	1.08284	1.06399	1.06003	1.06423	
July 25 2017	244.68581	1.08287	1.06402	1.06006	1.06426	
July 26 2017	244.69255	1.08290	1.06405	1.06009	1.06429	
July 27 2017	244.69929	1.08293	1.06408	1.06012	1.06432	
July 28 2017	244.70603	1.08296	1.06411	1.06015	1.06435	
July 29 2017	244.71277	1.08299	1.06414	1.06018	1.06438	
July 30 2017	244.71952	1.08302	1.06417	1.06021	1.06441	
July 31 2017	244.72626	1.08305	1.06420	1.06024	1.06444	
CPI-U (NSA) for:	March 2017	243.801	April 2017	244.524	May 2017	244.733

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)
Ref CPI and Index Ratios for
July 2017

Security: Description: CUSIP Number: Dated Date: Original Issue Date: Additional Issue Date(s):			0-1/8% 5-Year TIPS Series X-2018 912828UX6 April 15, 2013 April 30, 2013 August 30, 2013 December 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:			April 15, 2018 231.16013	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	
July 1 2017	244.52400	1.05781	1.05073	1.04797	1.04919	
July 2 2017	244.53074	1.05784	1.05076	1.04800	1.04922	
July 3 2017	244.53748	1.05787	1.05079	1.04803	1.04925	
July 4 2017	244.54423	1.05790	1.05082	1.04806	1.04928	
July 5 2017	244.55097	1.05793	1.05085	1.04809	1.04931	
July 6 2017	244.55771	1.05796	1.05088	1.04812	1.04934	
July 7 2017	244.56445	1.05799	1.05090	1.04815	1.04937	
July 8 2017	244.57119	1.05802	1.05093	1.04817	1.04940	
July 9 2017	244.57794	1.05805	1.05096	1.04820	1.04942	
July 10 2017	244.58468	1.05807	1.05099	1.04823	1.04945	
July 11 2017	244.59142	1.05810	1.05102	1.04826	1.04948	
July 12 2017	244.59816	1.05813	1.05105	1.04829	1.04951	
July 13 2017	244.60490	1.05816	1.05108	1.04832	1.04954	
July 14 2017	244.61165	1.05819	1.05111	1.04835	1.04957	
July 15 2017	244.61839	1.05822	1.05114	1.04838	1.04960	
July 16 2017	244.62513	1.05825	1.05117	1.04841	1.04963	
July 17 2017	244.63187	1.05828	1.05119	1.04843	1.04966	
July 18 2017	244.63861	1.05831	1.05122	1.04846	1.04969	
July 19 2017	244.64535	1.05834	1.05125	1.04849	1.04971	
July 20 2017	244.65210	1.05837	1.05128	1.04852	1.04974	
July 21 2017	244.65884	1.05840	1.05131	1.04855	1.04977	
July 22 2017	244.66558	1.05842	1.05134	1.04858	1.04980	
July 23 2017	244.67232	1.05845	1.05137	1.04861	1.04983	
July 24 2017	244.67906	1.05848	1.05140	1.04864	1.04986	
July 25 2017	244.68581	1.05851	1.05143	1.04867	1.04989	
July 26 2017	244.69255	1.05854	1.05146	1.04869	1.04992	
July 27 2017	244.69929	1.05857	1.05148	1.04872	1.04995	
July 28 2017	244.70603	1.05860	1.05151	1.04875	1.04997	
July 29 2017	244.71277	1.05863	1.05154	1.04878	1.05000	
July 30 2017	244.71952	1.05866	1.05157	1.04881	1.05003	
July 31 2017	244.72626	1.05869	1.05160	1.04884	1.05006	
CPI-U (NSA) for:	March 2017	243.801	April 2017	244.524	May 2017	244.733

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)
Ref CPI and Index Ratios for
July 2017

Security: Description: CUSIP Number: Dated Date: Original Issue Date: Additional Issue Date(s):			0-1/8% 5-Year TIPS Series X-2019 912828C99 April 15, 2014 April 30, 2014 August 29, 2014 December 31, 2014	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
Maturity Date: Ref CPI on Dated Date:			April 15, 2019 234.31967	July 15, 2024 237.44594	January 15, 2025 236.85403	February 15, 2045 235.48150
Date	Ref CPI	Index Ratio	Index Ratio	Index Ratio	Index Ratio	
July 1 2017	244.52400	1.04355	1.02981	1.03238	1.03840	
July 2 2017	244.53074	1.04358	1.02984	1.03241	1.03843	
July 3 2017	244.53748	1.04361	1.02987	1.03244	1.03846	
July 4 2017	244.54423	1.04364	1.02989	1.03247	1.03849	
July 5 2017	244.55097	1.04366	1.02992	1.03250	1.03851	
July 6 2017	244.55771	1.04369	1.02995	1.03253	1.03854	
July 7 2017	244.56445	1.04372	1.02998	1.03255	1.03857	
July 8 2017	244.57119	1.04375	1.03001	1.03258	1.03860	
July 9 2017	244.57794	1.04378	1.03004	1.03261	1.03863	
July 10 2017	244.58468	1.04381	1.03006	1.03264	1.03866	
July 11 2017	244.59142	1.04384	1.03009	1.03267	1.03869	
July 12 2017	244.59816	1.04387	1.03012	1.03270	1.03871	
July 13 2017	244.60490	1.04389	1.03015	1.03272	1.03874	
July 14 2017	244.61165	1.04392	1.03018	1.03275	1.03877	
July 15 2017	244.61839	1.04395	1.03021	1.03278	1.03880	
July 16 2017	244.62513	1.04398	1.03024	1.03281	1.03883	
July 17 2017	244.63187	1.04401	1.03026	1.03284	1.03886	
July 18 2017	244.63861	1.04404	1.03029	1.03287	1.03889	
July 19 2017	244.64535	1.04407	1.03032	1.03290	1.03892	
July 20 2017	244.65210	1.04410	1.03035	1.03292	1.03894	
July 21 2017	244.65884	1.04412	1.03038	1.03295	1.03897	
July 22 2017	244.66558	1.04415	1.03041	1.03298	1.03900	
July 23 2017	244.67232	1.04418	1.03043	1.03301	1.03903	
July 24 2017	244.67906	1.04421	1.03046	1.03304	1.03906	
July 25 2017	244.68581	1.04424	1.03049	1.03307	1.03909	
July 26 2017	244.69255	1.04427	1.03052	1.03309	1.03912	
July 27 2017	244.69929	1.04430	1.03055	1.03312	1.03914	
July 28 2017	244.70603	1.04433	1.03058	1.03315	1.03917	
July 29 2017	244.71277	1.04435	1.03060	1.03318	1.03920	
July 30 2017	244.71952	1.04438	1.03063	1.03321	1.03923	
July 31 2017	244.72626	1.04441	1.03066	1.03324	1.03926	
CPI-U (NSA) for:	March 2017	243.801	April 2017	244.524	May 2017	244.733

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)
Ref CPI and Index Ratios for
July 2017

Security: Description: CUSIP Number: Dated Date: Original Issue Date: Additional Issue Date(s):			0-1/8% 5-Year TIPS Series X-2020 912828K33 April 15, 2015 April 30, 2015 August 31, 2015 December 31, 2015	0-3/8% 10-Year TIPS Series D-2025 912828XL9 July 15, 2015 July 31, 2015 September 30, 2015 November 30, 2015	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
Maturity Date: Ref CPI on Dated Date:			April 15, 2020 234.18067	July 15, 2025 237.14365	January 15, 2026 237.61129	February 15, 2046 236.94448
Date	Ref CPI	Index Ratio	Index Ratio	Index Ratio	Index Ratio	
July 1 2017	244.52400	1.04417	1.03112	1.02909	1.03199	
July 2 2017	244.53074	1.04420	1.03115	1.02912	1.03202	
July 3 2017	244.53748	1.04423	1.03118	1.02915	1.03205	
July 4 2017	244.54423	1.04425	1.03121	1.02918	1.03207	
July 5 2017	244.55097	1.04428	1.03124	1.02921	1.03210	
July 6 2017	244.55771	1.04431	1.03126	1.02923	1.03213	
July 7 2017	244.56445	1.04434	1.03129	1.02926	1.03216	
July 8 2017	244.57119	1.04437	1.03132	1.02929	1.03219	
July 9 2017	244.57794	1.04440	1.03135	1.02932	1.03222	
July 10 2017	244.58468	1.04443	1.03138	1.02935	1.03224	
July 11 2017	244.59142	1.04446	1.03141	1.02938	1.03227	
July 12 2017	244.59816	1.04448	1.03143	1.02940	1.03230	
July 13 2017	244.60490	1.04451	1.03146	1.02943	1.03233	
July 14 2017	244.61165	1.04454	1.03149	1.02946	1.03236	
July 15 2017	244.61839	1.04457	1.03152	1.02949	1.03239	
July 16 2017	244.62513	1.04460	1.03155	1.02952	1.03242	
July 17 2017	244.63187	1.04463	1.03158	1.02955	1.03244	
July 18 2017	244.63861	1.04466	1.03161	1.02957	1.03247	
July 19 2017	244.64535	1.04469	1.03163	1.02960	1.03250	
July 20 2017	244.65210	1.04472	1.03166	1.02963	1.03253	
July 21 2017	244.65884	1.04474	1.03169	1.02966	1.03256	
July 22 2017	244.66558	1.04477	1.03172	1.02969	1.03259	
July 23 2017	244.67232	1.04480	1.03175	1.02972	1.03261	
July 24 2017	244.67906	1.04483	1.03178	1.02975	1.03264	
July 25 2017	244.68581	1.04486	1.03180	1.02977	1.03267	
July 26 2017	244.69255	1.04489	1.03183	1.02980	1.03270	
July 27 2017	244.69929	1.04492	1.03186	1.02983	1.03273	
July 28 2017	244.70603	1.04495	1.03189	1.02986	1.03276	
July 29 2017	244.71277	1.04497	1.03192	1.02989	1.03279	
July 30 2017	244.71952	1.04500	1.03195	1.02992	1.03281	
July 31 2017	244.72626	1.04503	1.03197	1.02994	1.03284	
CPI-U (NSA) for:	March 2017	243.801	April 2017	244.524	May 2017	244.733

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)
Ref CPI and Index Ratios for
July 2017

Security: Description: CUSIP Number: Dated Date: Original Issue Date: Additional Issue Date(s):			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	0-3/8% 10-Year TIPS Series A-2027 912828V49 January 15, 2017 January 31, 2017 March 31, 2017 May 31, 2017	0-7/8% 30-Year TIPS TIPS of February 2047 912810RW0 February 15, 2017 February 28, 2017
Maturity Date: Ref CPI on Dated Date:			April 15, 2021 237.00700	July 15, 2026 239.70132	January 15, 2027 241.55919	February 15, 2047 241.39250
Date	Ref CPI	Index Ratio	Index Ratio	Index Ratio	Index Ratio	
July 1 2017	244.52400	1.03172	1.02012	1.01227	1.01297	
July 2 2017	244.53074	1.03174	1.02015	1.01230	1.01300	
July 3 2017	244.53748	1.03177	1.02018	1.01233	1.01303	
July 4 2017	244.54423	1.03180	1.02020	1.01236	1.01306	
July 5 2017	244.55097	1.03183	1.02023	1.01239	1.01308	
July 6 2017	244.55771	1.03186	1.02026	1.01241	1.01311	
July 7 2017	244.56445	1.03189	1.02029	1.01244	1.01314	
July 8 2017	244.57119	1.03192	1.02032	1.01247	1.01317	
July 9 2017	244.57794	1.03194	1.02034	1.01250	1.01320	
July 10 2017	244.58468	1.03197	1.02037	1.01252	1.01322	
July 11 2017	244.59142	1.03200	1.02040	1.01255	1.01325	
July 12 2017	244.59816	1.03203	1.02043	1.01258	1.01328	
July 13 2017	244.60490	1.03206	1.02046	1.01261	1.01331	
July 14 2017	244.61165	1.03209	1.02049	1.01264	1.01334	
July 15 2017	244.61839	1.03211	1.02051	1.01266	1.01336	
July 16 2017	244.62513	1.03214	1.02054	1.01269	1.01339	
July 17 2017	244.63187	1.03217	1.02057	1.01272	1.01342	
July 18 2017	244.63861	1.03220	1.02060	1.01275	1.01345	
July 19 2017	244.64535	1.03223	1.02063	1.01278	1.01348	
July 20 2017	244.65210	1.03226	1.02065	1.01280	1.01350	
July 21 2017	244.65884	1.03229	1.02068	1.01283	1.01353	
July 22 2017	244.66558	1.03231	1.02071	1.01286	1.01356	
July 23 2017	244.67232	1.03234	1.02074	1.01289	1.01359	
July 24 2017	244.67906	1.03237	1.02077	1.01292	1.01362	
July 25 2017	244.68581	1.03240	1.02079	1.01294	1.01364	
July 26 2017	244.69255	1.03243	1.02082	1.01297	1.01367	
July 27 2017	244.69929	1.03246	1.02085	1.01300	1.01370	
July 28 2017	244.70603	1.03248	1.02088	1.01303	1.01373	
July 29 2017	244.71277	1.03251	1.02091	1.01306	1.01375	
July 30 2017	244.71952	1.03254	1.02094	1.01308	1.01378	
July 31 2017	244.72626	1.03257	1.02096	1.01311	1.01381	
CPI-U (NSA) for:	March 2017	243.801	April 2017	244.524	May 2017	244.733

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)
Ref CPI and Index Ratios for
July 2017

Security:			0-1/8% 5-Year TIPS					
Description:			Series X-2022					
CUSIP Number:			912828X39					
Dated Date:			April 15, 2017					
Original Issue Date:			April 28, 2017					
Additional Issue Date(s):								
Maturity Date:			April 15, 2022					
Ref CPI on Dated Date:			243.19553					
Date			Ref CPI		Index Ratio			
July	1	2017	244.52400	1.00546				
July	2	2017	244.53074	1.00549				
July	3	2017	244.53748	1.00552				
July	4	2017	244.54423	1.00555				
July	5	2017	244.55097	1.00557				
July	6	2017	244.55771	1.00560				
July	7	2017	244.56445	1.00563				
July	8	2017	244.57119	1.00566				
July	9	2017	244.57794	1.00568				
July	10	2017	244.58468	1.00571				
July	11	2017	244.59142	1.00574				
July	12	2017	244.59816	1.00577				
July	13	2017	244.60490	1.00580				
July	14	2017	244.61165	1.00582				
July	15	2017	244.61839	1.00585				
July	16	2017	244.62513	1.00588				
July	17	2017	244.63187	1.00591				
July	18	2017	244.63861	1.00593				
July	19	2017	244.64535	1.00596				
July	20	2017	244.65210	1.00599				
July	21	2017	244.65884	1.00602				
July	22	2017	244.66558	1.00604				
July	23	2017	244.67232	1.00607				
July	24	2017	244.67906	1.00610				
July	25	2017	244.68581	1.00613				
July	26	2017	244.69255	1.00616				
July	27	2017	244.69929	1.00618				
July	28	2017	244.70603	1.00621				
July	29	2017	244.71277	1.00624				
July	30	2017	244.71952	1.00627				
July	31	2017	244.72626	1.00629				
CPI-U (NSA) for:			March 2017	243.801	April 2017	244.524	May 2017	244.733