

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)
Ref CPI and Index Ratios for
August 2018

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	
August	1	2018	251.58800	1.55551	1.53040	1.41740	1.33471	
August	2	2018	251.60094	1.55559	1.53048	1.41747	1.33478	
August	3	2018	251.61387	1.55567	1.53056	1.41754	1.33484	
August	4	2018	251.62681	1.55575	1.53064	1.41762	1.33491	
August	5	2018	251.63974	1.55583	1.53072	1.41769	1.33498	
August	6	2018	251.65268	1.55591	1.53080	1.41776	1.33505	
August	7	2018	251.66561	1.55599	1.53087	1.41783	1.33512	
August	8	2018	251.67855	1.55607	1.53095	1.41791	1.33519	
August	9	2018	251.69148	1.55615	1.53103	1.41798	1.33526	
August	10	2018	251.70442	1.55623	1.53111	1.41805	1.33532	
August	11	2018	251.71735	1.55631	1.53119	1.41813	1.33539	
August	12	2018	251.73029	1.55639	1.53127	1.41820	1.33546	
August	13	2018	251.74323	1.55647	1.53135	1.41827	1.33553	
August	14	2018	251.75616	1.55655	1.53143	1.41834	1.33560	
August	15	2018	251.76910	1.55663	1.53150	1.41842	1.33567	
August	16	2018	251.78203	1.55671	1.53158	1.41849	1.33574	
August	17	2018	251.79497	1.55679	1.53166	1.41856	1.33581	
August	18	2018	251.80790	1.55687	1.53174	1.41864	1.33587	
August	19	2018	251.82084	1.55695	1.53182	1.41871	1.33594	
August	20	2018	251.83377	1.55703	1.53190	1.41878	1.33601	
August	21	2018	251.84671	1.55711	1.53198	1.41885	1.33608	
August	22	2018	251.85965	1.55719	1.53206	1.41893	1.33615	
August	23	2018	251.87258	1.55727	1.53213	1.41900	1.33622	
August	24	2018	251.88552	1.55735	1.53221	1.41907	1.33629	
August	25	2018	251.89845	1.55743	1.53229	1.41915	1.33635	
August	26	2018	251.91139	1.55751	1.53237	1.41922	1.33642	
August	27	2018	251.92432	1.55759	1.53245	1.41929	1.33649	
August	28	2018	251.93726	1.55767	1.53253	1.41936	1.33656	
August	29	2018	251.95019	1.55775	1.53261	1.41944	1.33663	
August	30	2018	251.96313	1.55783	1.53268	1.41951	1.33670	
August	31	2018	251.97606	1.55791	1.53276	1.41958	1.33677	
CPI-U (NSA) for:			April 2018	250.546	May 2018	251.588	June 2018	251.989

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)
Ref CPI and Index Ratios for
August 2018

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	2-1/8% 10-Year TIPS Series A-2019 912828JX9 January 15, 2009 January 15, 2009 April 15, 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, 2019 214.69971		
Date			Ref CPI	Index Ratio	Index Ratio	Index Ratio	Index Ratio	
August	1	2018	251.58800	1.26759	1.24756	1.20092	1.17181	
August	2	2018	251.60094	1.26766	1.24762	1.20098	1.17187	
August	3	2018	251.61387	1.26772	1.24769	1.20104	1.17193	
August	4	2018	251.62681	1.26779	1.24775	1.20110	1.17199	
August	5	2018	251.63974	1.26785	1.24781	1.20116	1.17205	
August	6	2018	251.65268	1.26792	1.24788	1.20123	1.17211	
August	7	2018	251.66561	1.26798	1.24794	1.20129	1.17217	
August	8	2018	251.67855	1.26805	1.24801	1.20135	1.17224	
August	9	2018	251.69148	1.26811	1.24807	1.20141	1.17230	
August	10	2018	251.70442	1.26818	1.24813	1.20147	1.17236	
August	11	2018	251.71735	1.26824	1.24820	1.20154	1.17242	
August	12	2018	251.73029	1.26831	1.24826	1.20160	1.17248	
August	13	2018	251.74323	1.26837	1.24833	1.20166	1.17254	
August	14	2018	251.75616	1.26844	1.24839	1.20172	1.17260	
August	15	2018	251.76910	1.26850	1.24846	1.20178	1.17266	
August	16	2018	251.78203	1.26857	1.24852	1.20184	1.17272	
August	17	2018	251.79497	1.26863	1.24858	1.20191	1.17278	
August	18	2018	251.80790	1.26870	1.24865	1.20197	1.17284	
August	19	2018	251.82084	1.26876	1.24871	1.20203	1.17290	
August	20	2018	251.83377	1.26883	1.24878	1.20209	1.17296	
August	21	2018	251.84671	1.26889	1.24884	1.20215	1.17302	
August	22	2018	251.85965	1.26896	1.24890	1.20221	1.17308	
August	23	2018	251.87258	1.26902	1.24897	1.20228	1.17314	
August	24	2018	251.88552	1.26909	1.24903	1.20234	1.17320	
August	25	2018	251.89845	1.26915	1.24910	1.20240	1.17326	
August	26	2018	251.91139	1.26922	1.24916	1.20246	1.17332	
August	27	2018	251.92432	1.26928	1.24922	1.20252	1.17338	
August	28	2018	251.93726	1.26935	1.24929	1.20258	1.17344	
August	29	2018	251.95019	1.26941	1.24935	1.20265	1.17350	
August	30	2018	251.96313	1.26948	1.24942	1.20271	1.17356	
August	31	2018	251.97606	1.26955	1.24948	1.20277	1.17362	
CPI-U (NSA) for:			April 2018	250.546	May 2018	251.588	June 2018	251.989

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)
Ref CPI and Index Ratios for
August 2018

Security: Description: CUSIP Number: Dated Date: Original Issue Date: Additional Issue Date(s):			2-1/2% 20-Year TIPS TIPS of January 2029 912810PZ5 January 15, 2009 January 30, 2009 July 31, 2009	1-7/8% 10-Year TIPS Series D-2019 912828LA6 July 15, 2009 July 15, 2009 October 15, 2009	1-3/8% 10-Year TIPS Series A-2020 912828MF4 January 15, 2010 January 15, 2010 April 15, 2010	2-1/8% 30-Year TIPS TIPS of February 2040 912810QF8 February 15, 2010 February 26, 2010 August 31, 2010
Maturity Date: Ref CPI on Dated Date:			January 15, 2029 214.69971	July 15, 2019 213.51819	January 15, 2020 216.24610	February 15, 2040 216.13950
Date	Ref CPI	Index Ratio	Index Ratio	Index Ratio	Index Ratio	
August 1 2018	251.58800	1.17181	1.17830	1.16343	1.16401	
August 2 2018	251.60094	1.17187	1.17836	1.16349	1.16407	
August 3 2018	251.61387	1.17193	1.17842	1.16355	1.16413	
August 4 2018	251.62681	1.17199	1.17848	1.16361	1.16419	
August 5 2018	251.63974	1.17205	1.17854	1.16367	1.16425	
August 6 2018	251.65268	1.17211	1.17860	1.16373	1.16431	
August 7 2018	251.66561	1.17217	1.17866	1.16379	1.16437	
August 8 2018	251.67855	1.17224	1.17872	1.16385	1.16443	
August 9 2018	251.69148	1.17230	1.17878	1.16391	1.16449	
August 10 2018	251.70442	1.17236	1.17884	1.16397	1.16455	
August 11 2018	251.71735	1.17242	1.17890	1.16403	1.16461	
August 12 2018	251.73029	1.17248	1.17896	1.16409	1.16467	
August 13 2018	251.74323	1.17254	1.17902	1.16415	1.16473	
August 14 2018	251.75616	1.17260	1.17909	1.16421	1.16479	
August 15 2018	251.76910	1.17266	1.17915	1.16427	1.16485	
August 16 2018	251.78203	1.17272	1.17921	1.16433	1.16491	
August 17 2018	251.79497	1.17278	1.17927	1.16439	1.16497	
August 18 2018	251.80790	1.17284	1.17933	1.16445	1.16502	
August 19 2018	251.82084	1.17290	1.17939	1.16451	1.16508	
August 20 2018	251.83377	1.17296	1.17945	1.16457	1.16514	
August 21 2018	251.84671	1.17302	1.17951	1.16463	1.16520	
August 22 2018	251.85965	1.17308	1.17957	1.16469	1.16526	
August 23 2018	251.87258	1.17314	1.17963	1.16475	1.16532	
August 24 2018	251.88552	1.17320	1.17969	1.16481	1.16538	
August 25 2018	251.89845	1.17326	1.17975	1.16487	1.16544	
August 26 2018	251.91139	1.17332	1.17981	1.16493	1.16550	
August 27 2018	251.92432	1.17338	1.17987	1.16499	1.16556	
August 28 2018	251.93726	1.17344	1.17993	1.16505	1.16562	
August 29 2018	251.95019	1.17350	1.17999	1.16511	1.16568	
August 30 2018	251.96313	1.17356	1.18005	1.16517	1.16574	
August 31 2018	251.97606	1.17362	1.18012	1.16523	1.16580	
CPI-U (NSA) for:	April 2018	250.546	May 2018	251.588	June 2018	251.989

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)
Ref CPI and Index Ratios for
August 2018

Security: Description: CUSIP Number: Dated Date: Original Issue Date: Additional Issue Date(s):			1-1/4% 10-Year TIPS Series D-2020 912828NM8 July 15, 2010 July 15, 2010 September 15, 2010 November 15, 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:			July 15, 2020 218.08532	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	
August 1 2018	251.58800	1.15362	1.15010	1.14885	1.11626	
August 2 2018	251.60094	1.15368	1.15016	1.14891	1.11632	
August 3 2018	251.61387	1.15374	1.15022	1.14897	1.11638	
August 4 2018	251.62681	1.15380	1.15028	1.14903	1.11644	
August 5 2018	251.63974	1.15386	1.15034	1.14909	1.11649	
August 6 2018	251.65268	1.15392	1.15040	1.14915	1.11655	
August 7 2018	251.66561	1.15398	1.15046	1.14921	1.11661	
August 8 2018	251.67855	1.15404	1.15052	1.14926	1.11667	
August 9 2018	251.69148	1.15410	1.15058	1.14932	1.11672	
August 10 2018	251.70442	1.15416	1.15064	1.14938	1.11678	
August 11 2018	251.71735	1.15422	1.15069	1.14944	1.11684	
August 12 2018	251.73029	1.15427	1.15075	1.14950	1.11690	
August 13 2018	251.74323	1.15433	1.15081	1.14956	1.11695	
August 14 2018	251.75616	1.15439	1.15087	1.14962	1.11701	
August 15 2018	251.76910	1.15445	1.15093	1.14968	1.11707	
August 16 2018	251.78203	1.15451	1.15099	1.14974	1.11713	
August 17 2018	251.79497	1.15457	1.15105	1.14980	1.11718	
August 18 2018	251.80790	1.15463	1.15111	1.14986	1.11724	
August 19 2018	251.82084	1.15469	1.15117	1.14991	1.11730	
August 20 2018	251.83377	1.15475	1.15123	1.14997	1.11736	
August 21 2018	251.84671	1.15481	1.15129	1.15003	1.11741	
August 22 2018	251.85965	1.15487	1.15134	1.15009	1.11747	
August 23 2018	251.87258	1.15493	1.15140	1.15015	1.11753	
August 24 2018	251.88552	1.15499	1.15146	1.15021	1.11758	
August 25 2018	251.89845	1.15505	1.15152	1.15027	1.11764	
August 26 2018	251.91139	1.15510	1.15158	1.15033	1.11770	
August 27 2018	251.92432	1.15516	1.15164	1.15039	1.11776	
August 28 2018	251.93726	1.15522	1.15170	1.15045	1.11781	
August 29 2018	251.95019	1.15528	1.15176	1.15050	1.11787	
August 30 2018	251.96313	1.15534	1.15182	1.15056	1.11793	
August 31 2018	251.97606	1.15540	1.15188	1.15062	1.11799	
CPI-U (NSA) for:	April 2018	250.546	May 2018	251.588	June 2018	251.989

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)
Ref CPI and Index Ratios for
August 2018

Security: Description: CUSIP Number: Dated Date: Original Issue Date: Additional Issue Date(s):			0-1/8% 10-Year TIPS Series A-2022 912828SA9 January 15, 2012 January 31, 2012 March 30, 2012 May 31, 2012	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
Maturity Date: Ref CPI on Dated Date:			January 15, 2022 226.33474	February 15, 2042 225.96062	July 15, 2022 229.96306	January 15, 2023 230.82203
Date	Ref CPI	Index Ratio	Index Ratio	Index Ratio	Index Ratio	
August 1 2018	251.58800	1.11157	1.11342	1.09404	1.08997	
August 2 2018	251.60094	1.11163	1.11347	1.09409	1.09002	
August 3 2018	251.61387	1.11169	1.11353	1.09415	1.09008	
August 4 2018	251.62681	1.11175	1.11359	1.09421	1.09013	
August 5 2018	251.63974	1.11180	1.11364	1.09426	1.09019	
August 6 2018	251.65268	1.11186	1.11370	1.09432	1.09025	
August 7 2018	251.66561	1.11192	1.11376	1.09437	1.09030	
August 8 2018	251.67855	1.11197	1.11382	1.09443	1.09036	
August 9 2018	251.69148	1.11203	1.11387	1.09449	1.09041	
August 10 2018	251.70442	1.11209	1.11393	1.09454	1.09047	
August 11 2018	251.71735	1.11215	1.11399	1.09460	1.09053	
August 12 2018	251.73029	1.11220	1.11404	1.09466	1.09058	
August 13 2018	251.74323	1.11226	1.11410	1.09471	1.09064	
August 14 2018	251.75616	1.11232	1.11416	1.09477	1.09069	
August 15 2018	251.76910	1.11237	1.11422	1.09482	1.09075	
August 16 2018	251.78203	1.11243	1.11427	1.09488	1.09081	
August 17 2018	251.79497	1.11249	1.11433	1.09494	1.09086	
August 18 2018	251.80790	1.11255	1.11439	1.09499	1.09092	
August 19 2018	251.82084	1.11260	1.11445	1.09505	1.09097	
August 20 2018	251.83377	1.11266	1.11450	1.09511	1.09103	
August 21 2018	251.84671	1.11272	1.11456	1.09516	1.09109	
August 22 2018	251.85965	1.11278	1.11462	1.09522	1.09114	
August 23 2018	251.87258	1.11283	1.11467	1.09527	1.09120	
August 24 2018	251.88552	1.11289	1.11473	1.09533	1.09125	
August 25 2018	251.89845	1.11295	1.11479	1.09539	1.09131	
August 26 2018	251.91139	1.11300	1.11485	1.09544	1.09137	
August 27 2018	251.92432	1.11306	1.11490	1.09550	1.09142	
August 28 2018	251.93726	1.11312	1.11496	1.09556	1.09148	
August 29 2018	251.95019	1.11318	1.11502	1.09561	1.09153	
August 30 2018	251.96313	1.11323	1.11508	1.09567	1.09159	
August 31 2018	251.97606	1.11329	1.11513	1.09572	1.09165	
CPI-U (NSA) for:	April 2018	250.546	May 2018	251.588	June 2018	251.989

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)
Ref CPI and Index Ratios for
August 2018

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	
August 1 2018	251.58800	1.09428	1.08109	1.07825	1.07950	
August 2 2018	251.60094	1.09434	1.08114	1.07830	1.07956	
August 3 2018	251.61387	1.09440	1.08120	1.07836	1.07961	
August 4 2018	251.62681	1.09445	1.08125	1.07841	1.07967	
August 5 2018	251.63974	1.09451	1.08131	1.07847	1.07973	
August 6 2018	251.65268	1.09457	1.08136	1.07852	1.07978	
August 7 2018	251.66561	1.09462	1.08142	1.07858	1.07984	
August 8 2018	251.67855	1.09468	1.08147	1.07864	1.07989	
August 9 2018	251.69148	1.09473	1.08153	1.07869	1.07995	
August 10 2018	251.70442	1.09479	1.08159	1.07875	1.08000	
August 11 2018	251.71735	1.09485	1.08164	1.07880	1.08006	
August 12 2018	251.73029	1.09490	1.08170	1.07886	1.08011	
August 13 2018	251.74323	1.09496	1.08175	1.07891	1.08017	
August 14 2018	251.75616	1.09502	1.08181	1.07897	1.08023	
August 15 2018	251.76910	1.09507	1.08186	1.07902	1.08028	
August 16 2018	251.78203	1.09513	1.08192	1.07908	1.08034	
August 17 2018	251.79497	1.09518	1.08197	1.07913	1.08039	
August 18 2018	251.80790	1.09524	1.08203	1.07919	1.08045	
August 19 2018	251.82084	1.09530	1.08209	1.07924	1.08050	
August 20 2018	251.83377	1.09535	1.08214	1.07930	1.08056	
August 21 2018	251.84671	1.09541	1.08220	1.07936	1.08061	
August 22 2018	251.85965	1.09547	1.08225	1.07941	1.08067	
August 23 2018	251.87258	1.09552	1.08231	1.07947	1.08072	
August 24 2018	251.88552	1.09558	1.08236	1.07952	1.08078	
August 25 2018	251.89845	1.09563	1.08242	1.07958	1.08084	
August 26 2018	251.91139	1.09569	1.08248	1.07963	1.08089	
August 27 2018	251.92432	1.09575	1.08253	1.07969	1.08095	
August 28 2018	251.93726	1.09580	1.08259	1.07974	1.08100	
August 29 2018	251.95019	1.09586	1.08264	1.07980	1.08106	
August 30 2018	251.96313	1.09592	1.08270	1.07985	1.08111	
August 31 2018	251.97606	1.09597	1.08275	1.07991	1.08117	
CPI-U (NSA) for:	April 2018	250.546	May 2018	251.588	June 2018	251.989

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)
Ref CPI and Index Ratios for
August 2018

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	
August 1 2018	251.58800	1.07370	1.05956	1.06221	1.06840	
August 2 2018	251.60094	1.07375	1.05961	1.06226	1.06845	
August 3 2018	251.61387	1.07381	1.05967	1.06232	1.06851	
August 4 2018	251.62681	1.07386	1.05972	1.06237	1.06856	
August 5 2018	251.63974	1.07392	1.05978	1.06243	1.06862	
August 6 2018	251.65268	1.07397	1.05983	1.06248	1.06867	
August 7 2018	251.66561	1.07403	1.05989	1.06253	1.06873	
August 8 2018	251.67855	1.07408	1.05994	1.06259	1.06878	
August 9 2018	251.69148	1.07414	1.05999	1.06264	1.06884	
August 10 2018	251.70442	1.07419	1.06005	1.06270	1.06889	
August 11 2018	251.71735	1.07425	1.06010	1.06275	1.06895	
August 12 2018	251.73029	1.07430	1.06016	1.06281	1.06900	
August 13 2018	251.74323	1.07436	1.06021	1.06286	1.06906	
August 14 2018	251.75616	1.07441	1.06027	1.06292	1.06911	
August 15 2018	251.76910	1.07447	1.06032	1.06297	1.06917	
August 16 2018	251.78203	1.07452	1.06038	1.06303	1.06922	
August 17 2018	251.79497	1.07458	1.06043	1.06308	1.06928	
August 18 2018	251.80790	1.07463	1.06049	1.06314	1.06933	
August 19 2018	251.82084	1.07469	1.06054	1.06319	1.06939	
August 20 2018	251.83377	1.07474	1.06059	1.06324	1.06944	
August 21 2018	251.84671	1.07480	1.06065	1.06330	1.06950	
August 22 2018	251.85965	1.07485	1.06070	1.06335	1.06955	
August 23 2018	251.87258	1.07491	1.06076	1.06341	1.06961	
August 24 2018	251.88552	1.07497	1.06081	1.06346	1.06966	
August 25 2018	251.89845	1.07502	1.06087	1.06352	1.06972	
August 26 2018	251.91139	1.07508	1.06092	1.06357	1.06977	
August 27 2018	251.92432	1.07513	1.06098	1.06363	1.06983	
August 28 2018	251.93726	1.07519	1.06103	1.06368	1.06988	
August 29 2018	251.95019	1.07524	1.06108	1.06374	1.06994	
August 30 2018	251.96313	1.07530	1.06114	1.06379	1.06999	
August 31 2018	251.97606	1.07535	1.06119	1.06385	1.07005	
CPI-U (NSA) for:	April 2018	250.546	May 2018	251.588	June 2018	251.989

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)
Ref CPI and Index Ratios for
August 2018

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	
August 1 2018	251.58800	1.07433	1.06091	1.05882	1.06180	
August 2 2018	251.60094	1.07439	1.06096	1.05888	1.06186	
August 3 2018	251.61387	1.07444	1.06102	1.05893	1.06191	
August 4 2018	251.62681	1.07450	1.06107	1.05899	1.06197	
August 5 2018	251.63974	1.07455	1.06113	1.05904	1.06202	
August 6 2018	251.65268	1.07461	1.06118	1.05909	1.06207	
August 7 2018	251.66561	1.07466	1.06124	1.05915	1.06213	
August 8 2018	251.67855	1.07472	1.06129	1.05920	1.06218	
August 9 2018	251.69148	1.07477	1.06135	1.05926	1.06224	
August 10 2018	251.70442	1.07483	1.06140	1.05931	1.06229	
August 11 2018	251.71735	1.07489	1.06146	1.05937	1.06235	
August 12 2018	251.73029	1.07494	1.06151	1.05942	1.06240	
August 13 2018	251.74323	1.07500	1.06156	1.05948	1.06246	
August 14 2018	251.75616	1.07505	1.06162	1.05953	1.06251	
August 15 2018	251.76910	1.07511	1.06167	1.05958	1.06257	
August 16 2018	251.78203	1.07516	1.06173	1.05964	1.06262	
August 17 2018	251.79497	1.07522	1.06178	1.05969	1.06267	
August 18 2018	251.80790	1.07527	1.06184	1.05975	1.06273	
August 19 2018	251.82084	1.07533	1.06189	1.05980	1.06278	
August 20 2018	251.83377	1.07538	1.06195	1.05986	1.06284	
August 21 2018	251.84671	1.07544	1.06200	1.05991	1.06289	
August 22 2018	251.85965	1.07549	1.06206	1.05996	1.06295	
August 23 2018	251.87258	1.07555	1.06211	1.06002	1.06300	
August 24 2018	251.88552	1.07560	1.06216	1.06007	1.06306	
August 25 2018	251.89845	1.07566	1.06222	1.06013	1.06311	
August 26 2018	251.91139	1.07571	1.06227	1.06018	1.06317	
August 27 2018	251.92432	1.07577	1.06233	1.06024	1.06322	
August 28 2018	251.93726	1.07582	1.06238	1.06029	1.06328	
August 29 2018	251.95019	1.07588	1.06244	1.06035	1.06333	
August 30 2018	251.96313	1.07593	1.06249	1.06040	1.06338	
August 31 2018	251.97606	1.07599	1.06255	1.06045	1.06344	
CPI-U (NSA) for:	April 2018	250.546	May 2018	251.588	June 2018	251.989

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)
Ref CPI and Index Ratios for
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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 June 30, 2017 October 31, 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	
August 1 2018	251.58800	1.06152	1.04959	1.04152	1.04224	
August 2 2018	251.60094	1.06158	1.04964	1.04157	1.04229	
August 3 2018	251.61387	1.06163	1.04970	1.04162	1.04234	
August 4 2018	251.62681	1.06169	1.04975	1.04168	1.04240	
August 5 2018	251.63974	1.06174	1.04981	1.04173	1.04245	
August 6 2018	251.65268	1.06179	1.04986	1.04178	1.04250	
August 7 2018	251.66561	1.06185	1.04991	1.04184	1.04256	
August 8 2018	251.67855	1.06190	1.04997	1.04189	1.04261	
August 9 2018	251.69148	1.06196	1.05002	1.04195	1.04266	
August 10 2018	251.70442	1.06201	1.05008	1.04200	1.04272	
August 11 2018	251.71735	1.06207	1.05013	1.04205	1.04277	
August 12 2018	251.73029	1.06212	1.05018	1.04211	1.04283	
August 13 2018	251.74323	1.06218	1.05024	1.04216	1.04288	
August 14 2018	251.75616	1.06223	1.05029	1.04221	1.04293	
August 15 2018	251.76910	1.06229	1.05035	1.04227	1.04299	
August 16 2018	251.78203	1.06234	1.05040	1.04232	1.04304	
August 17 2018	251.79497	1.06239	1.05045	1.04237	1.04309	
August 18 2018	251.80790	1.06245	1.05051	1.04243	1.04315	
August 19 2018	251.82084	1.06250	1.05056	1.04248	1.04320	
August 20 2018	251.83377	1.06256	1.05061	1.04253	1.04325	
August 21 2018	251.84671	1.06261	1.05067	1.04259	1.04331	
August 22 2018	251.85965	1.06267	1.05072	1.04264	1.04336	
August 23 2018	251.87258	1.06272	1.05078	1.04270	1.04342	
August 24 2018	251.88552	1.06278	1.05083	1.04275	1.04347	
August 25 2018	251.89845	1.06283	1.05088	1.04280	1.04352	
August 26 2018	251.91139	1.06289	1.05094	1.04286	1.04358	
August 27 2018	251.92432	1.06294	1.05099	1.04291	1.04363	
August 28 2018	251.93726	1.06300	1.05105	1.04296	1.04368	
August 29 2018	251.95019	1.06305	1.05110	1.04302	1.04374	
August 30 2018	251.96313	1.06310	1.05115	1.04307	1.04379	
August 31 2018	251.97606	1.06316	1.05121	1.04312	1.04384	
CPI-U (NSA) for:	April 2018	250.546	May 2018	251.588	June 2018	251.989

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)
Ref CPI and Index Ratios for
August 2018

Security: Description: CUSIP Number: Dated Date: Original Issue Date: Additional Issue Date(s):			0-1/8% 5-Year TIPS Series X-2022 912828X39 April 15, 2017 August 28, 2017 August 31, 2017 December 29, 2017	0-3/8% 10-Year TIPS Series D-2027 9128282L3 July 15, 2017 July 31, 2017 September 29, 2017 November 30, 2017	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
Maturity Date: Ref CPI on Dated Date:			April 15, 2022 243.19553	July 15, 2027 244.61839	January 15, 2028 246.66571	February 15, 2048 246.59650
Date	Ref CPI	Index Ratio	Index Ratio	Index Ratio	Index Ratio	
August 1 2018	251.58800	1.03451	1.02849	1.01996	1.02024	
August 2 2018	251.60094	1.03456	1.02854	1.02001	1.02029	
August 3 2018	251.61387	1.03462	1.02860	1.02006	1.02035	
August 4 2018	251.62681	1.03467	1.02865	1.02011	1.02040	
August 5 2018	251.63974	1.03472	1.02870	1.02017	1.02045	
August 6 2018	251.65268	1.03478	1.02876	1.02022	1.02050	
August 7 2018	251.66561	1.03483	1.02881	1.02027	1.02056	
August 8 2018	251.67855	1.03488	1.02886	1.02032	1.02061	
August 9 2018	251.69148	1.03493	1.02891	1.02037	1.02066	
August 10 2018	251.70442	1.03499	1.02897	1.02043	1.02071	
August 11 2018	251.71735	1.03504	1.02902	1.02048	1.02077	
August 12 2018	251.73029	1.03509	1.02907	1.02053	1.02082	
August 13 2018	251.74323	1.03515	1.02913	1.02058	1.02087	
August 14 2018	251.75616	1.03520	1.02918	1.02064	1.02092	
August 15 2018	251.76910	1.03525	1.02923	1.02069	1.02098	
August 16 2018	251.78203	1.03531	1.02928	1.02074	1.02103	
August 17 2018	251.79497	1.03536	1.02934	1.02079	1.02108	
August 18 2018	251.80790	1.03541	1.02939	1.02085	1.02113	
August 19 2018	251.82084	1.03547	1.02944	1.02090	1.02119	
August 20 2018	251.83377	1.03552	1.02950	1.02095	1.02124	
August 21 2018	251.84671	1.03557	1.02955	1.02100	1.02129	
August 22 2018	251.85965	1.03563	1.02960	1.02106	1.02134	
August 23 2018	251.87258	1.03568	1.02966	1.02111	1.02140	
August 24 2018	251.88552	1.03573	1.02971	1.02116	1.02145	
August 25 2018	251.89845	1.03579	1.02976	1.02121	1.02150	
August 26 2018	251.91139	1.03584	1.02981	1.02127	1.02155	
August 27 2018	251.92432	1.03589	1.02987	1.02132	1.02161	
August 28 2018	251.93726	1.03595	1.02992	1.02137	1.02166	
August 29 2018	251.95019	1.03600	1.02997	1.02142	1.02171	
August 30 2018	251.96313	1.03605	1.03003	1.02148	1.02176	
August 31 2018	251.97606	1.03610	1.03008	1.02153	1.02182	
CPI-U (NSA) for:	April 2018	250.546	May 2018	251.588	June 2018	251.989

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)
Ref CPI and Index Ratios for
August 2018

Security: Description: CUSIP Number: Dated Date: Original Issue Date: Additional Issue Date(s): Maturity Date: Ref CPI on Dated Date:			0-5/8% 5-Year TIPS Series X-2023 9128284H0 April 15, 2018 April 30, 2018 April 15, 2023 248.39153					
Date			Ref CPI		Index Ratio			
August	1	2018	251.58800		1.01287			
August	2	2018	251.60094		1.01292			
August	3	2018	251.61387		1.01297			
August	4	2018	251.62681		1.01302			
August	5	2018	251.63974		1.01308			
August	6	2018	251.65268		1.01313			
August	7	2018	251.66561		1.01318			
August	8	2018	251.67855		1.01323			
August	9	2018	251.69148		1.01329			
August	10	2018	251.70442		1.01334			
August	11	2018	251.71735		1.01339			
August	12	2018	251.73029		1.01344			
August	13	2018	251.74323		1.01349			
August	14	2018	251.75616		1.01355			
August	15	2018	251.76910		1.01360			
August	16	2018	251.78203		1.01365			
August	17	2018	251.79497		1.01370			
August	18	2018	251.80790		1.01375			
August	19	2018	251.82084		1.01381			
August	20	2018	251.83377		1.01386			
August	21	2018	251.84671		1.01391			
August	22	2018	251.85965		1.01396			
August	23	2018	251.87258		1.01401			
August	24	2018	251.88552		1.01407			
August	25	2018	251.89845		1.01412			
August	26	2018	251.91139		1.01417			
August	27	2018	251.92432		1.01422			
August	28	2018	251.93726		1.01427			
August	29	2018	251.95019		1.01433			
August	30	2018	251.96313		1.01438			
August	31	2018	251.97606		1.01443			
CPI-U (NSA) for:			April 2018	250.546	May 2018	251.588	June 2018	251.989