

**TREASURY INFLATION-PROTECTED SECURITIES (TIPS)**  
**Ref CPI and Index Ratios for**  
**December 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	
December 1 2017	246.81900	1.52602	1.50139	1.39053	1.30941	
December 2 2017	246.81397	1.52599	1.50136	1.39050	1.30938	
December 3 2017	246.80894	1.52596	1.50133	1.39047	1.30935	
December 4 2017	246.80390	1.52593	1.50130	1.39044	1.30933	
December 5 2017	246.79887	1.52590	1.50127	1.39042	1.30930	
December 6 2017	246.79384	1.52587	1.50124	1.39039	1.30927	
December 7 2017	246.78881	1.52584	1.50121	1.39036	1.30925	
December 8 2017	246.78377	1.52581	1.50118	1.39033	1.30922	
December 9 2017	246.77874	1.52577	1.50115	1.39030	1.30919	
December 10 2017	246.77371	1.52574	1.50112	1.39027	1.30917	
December 11 2017	246.76868	1.52571	1.50109	1.39025	1.30914	
December 12 2017	246.76365	1.52568	1.50106	1.39022	1.30911	
December 13 2017	246.75861	1.52565	1.50103	1.39019	1.30909	
December 14 2017	246.75358	1.52562	1.50100	1.39016	1.30906	
December 15 2017	246.74855	1.52559	1.50096	1.39013	1.30903	
December 16 2017	246.74352	1.52556	1.50093	1.39010	1.30901	
December 17 2017	246.73848	1.52553	1.50090	1.39008	1.30898	
December 18 2017	246.73345	1.52549	1.50087	1.39005	1.30895	
December 19 2017	246.72842	1.52546	1.50084	1.39002	1.30893	
December 20 2017	246.72339	1.52543	1.50081	1.38999	1.30890	
December 21 2017	246.71835	1.52540	1.50078	1.38996	1.30887	
December 22 2017	246.71332	1.52537	1.50075	1.38993	1.30885	
December 23 2017	246.70829	1.52534	1.50072	1.38991	1.30882	
December 24 2017	246.70326	1.52531	1.50069	1.38988	1.30879	
December 25 2017	246.69823	1.52528	1.50066	1.38985	1.30877	
December 26 2017	246.69319	1.52525	1.50063	1.38982	1.30874	
December 27 2017	246.68816	1.52521	1.50060	1.38979	1.30871	
December 28 2017	246.68313	1.52518	1.50057	1.38976	1.30869	
December 29 2017	246.67810	1.52515	1.50054	1.38974	1.30866	
December 30 2017	246.67306	1.52512	1.50051	1.38971	1.30863	
December 31 2017	246.66803	1.52509	1.50047	1.38968	1.30861	
<b>CPI-U (NSA) for:</b>			<b>August 2017 245.519</b>	<b>September 2017 246.819</b>	<b>October 2017 246.663</b>	

**TREASURY INFLATION-PROTECTED SECURITIES (TIPS)**  
**Ref CPI and Index Ratios for**  
**December 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	1-5/8% 10-Year TIPS Series A-2018 912828HN3 January 15, 2008 January 15, 2008 April 15, 2008	1-3/4% 20-Year TIPS TIPS of January 2028 912810PV4 January 15, 2008 January 31, 2008 July 31, 2008
Maturity Date: Ref CPI on Dated Date:			January 15, 2026 198.47742	January 15, 2027 201.66452	January 15, 2018 209.49645	January 15, 2028 209.49645
Date	Ref CPI	Index Ratio	Index Ratio	Index Ratio	Index Ratio	
December 1 2017	246.81900	1.24356	1.22391	1.17815	1.17815	
December 2 2017	246.81397	1.24354	1.22388	1.17813	1.17813	
December 3 2017	246.80894	1.24351	1.22386	1.17811	1.17811	
December 4 2017	246.80390	1.24349	1.22383	1.17808	1.17808	
December 5 2017	246.79887	1.24346	1.22381	1.17806	1.17806	
December 6 2017	246.79384	1.24344	1.22378	1.17803	1.17803	
December 7 2017	246.78881	1.24341	1.22376	1.17801	1.17801	
December 8 2017	246.78377	1.24338	1.22373	1.17799	1.17799	
December 9 2017	246.77874	1.24336	1.22371	1.17796	1.17796	
December 10 2017	246.77371	1.24333	1.22368	1.17794	1.17794	
December 11 2017	246.76868	1.24331	1.22366	1.17791	1.17791	
December 12 2017	246.76365	1.24328	1.22363	1.17789	1.17789	
December 13 2017	246.75861	1.24326	1.22361	1.17787	1.17787	
December 14 2017	246.75358	1.24323	1.22358	1.17784	1.17784	
December 15 2017	246.74855	1.24321	1.22356	1.17782	1.17782	
December 16 2017	246.74352	1.24318	1.22353	1.17779	1.17779	
December 17 2017	246.73848	1.24316	1.22351	1.17777	1.17777	
December 18 2017	246.73345	1.24313	1.22348	1.17775	1.17775	
December 19 2017	246.72842	1.24311	1.22346	1.17772	1.17772	
December 20 2017	246.72339	1.24308	1.22343	1.17770	1.17770	
December 21 2017	246.71835	1.24306	1.22341	1.17767	1.17767	
December 22 2017	246.71332	1.24303	1.22338	1.17765	1.17765	
December 23 2017	246.70829	1.24300	1.22336	1.17763	1.17763	
December 24 2017	246.70326	1.24298	1.22333	1.17760	1.17760	
December 25 2017	246.69823	1.24295	1.22331	1.17758	1.17758	
December 26 2017	246.69319	1.24293	1.22329	1.17755	1.17755	
December 27 2017	246.68816	1.24290	1.22326	1.17753	1.17753	
December 28 2017	246.68313	1.24288	1.22324	1.17751	1.17751	
December 29 2017	246.67810	1.24285	1.22321	1.17748	1.17748	
December 30 2017	246.67306	1.24283	1.22319	1.17746	1.17746	
December 31 2017	246.66803	1.24280	1.22316	1.17743	1.17743	
<b>CPI-U (NSA) for:</b>	<b>August 2017</b>	<b>245.519</b>	<b>September 2017</b>	<b>246.819</b>	<b>October 2017</b>	<b>246.663</b>

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

Security: Description: CUSIP Number: Dated Date: Original Issue Date: Additional Issue Date(s):			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	1-7/8% 10-Year TIPS Series D-2019 912828LA6 July 15, 2009 July 15, 2009 October 15, 2009
Maturity Date: Ref CPI on Dated Date:			July 15, 2018 215.63997	January 15, 2019 214.69971	January 15, 2029 214.69971	July 15, 2019 213.51819
Date	Ref CPI	Index Ratio	Index Ratio	Index Ratio	Index Ratio	
December 1 2017	246.81900	1.14459	1.14960	1.14960	1.15596	
December 2 2017	246.81397	1.14457	1.14958	1.14958	1.15594	
December 3 2017	246.80894	1.14454	1.14955	1.14955	1.15592	
December 4 2017	246.80390	1.14452	1.14953	1.14953	1.15589	
December 5 2017	246.79887	1.14450	1.14951	1.14951	1.15587	
December 6 2017	246.79384	1.14447	1.14948	1.14948	1.15584	
December 7 2017	246.78881	1.14445	1.14946	1.14946	1.15582	
December 8 2017	246.78377	1.14442	1.14944	1.14944	1.15580	
December 9 2017	246.77874	1.14440	1.14941	1.14941	1.15577	
December 10 2017	246.77371	1.14438	1.14939	1.14939	1.15575	
December 11 2017	246.76868	1.14436	1.14937	1.14937	1.15573	
December 12 2017	246.76365	1.14433	1.14934	1.14934	1.15570	
December 13 2017	246.75861	1.14431	1.14932	1.14932	1.15568	
December 14 2017	246.75358	1.14428	1.14930	1.14930	1.15566	
December 15 2017	246.74855	1.14426	1.14927	1.14927	1.15563	
December 16 2017	246.74352	1.14424	1.14925	1.14925	1.15561	
December 17 2017	246.73848	1.14421	1.14923	1.14923	1.15559	
December 18 2017	246.73345	1.14419	1.14920	1.14920	1.15556	
December 19 2017	246.72842	1.14417	1.14918	1.14918	1.15554	
December 20 2017	246.72339	1.14414	1.14916	1.14916	1.15551	
December 21 2017	246.71835	1.14412	1.14913	1.14913	1.15549	
December 22 2017	246.71332	1.14410	1.14911	1.14911	1.15547	
December 23 2017	246.70829	1.14407	1.14909	1.14909	1.15544	
December 24 2017	246.70326	1.14405	1.14906	1.14906	1.15542	
December 25 2017	246.69823	1.14403	1.14904	1.14904	1.15540	
December 26 2017	246.69319	1.14400	1.14902	1.14902	1.15537	
December 27 2017	246.68816	1.14398	1.14899	1.14899	1.15535	
December 28 2017	246.68313	1.14396	1.14897	1.14897	1.15533	
December 29 2017	246.67810	1.14393	1.14894	1.14894	1.15530	
December 30 2017	246.67306	1.14391	1.14892	1.14892	1.15528	
December 31 2017	246.66803	1.14389	1.14890	1.14890	1.15526	
<b>CPI-U (NSA) for:</b>	<b>August 2017</b>	<b>245.519</b>	<b>September 2017</b>	<b>246.819</b>	<b>October 2017</b>	<b>246.663</b>

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

Security: Description: CUSIP Number: Dated Date: Original Issue Date: Additional Issue Date(s):			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	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
Maturity Date: Ref CPI on Dated Date:			January 15, 2020 216.24610	February 15, 2040 216.13950	July 15, 2020 218.08532	January 15, 2021 218.75255
Date	Ref CPI	Index Ratio	Index Ratio	Index Ratio	Index Ratio	
December 1 2017	246.81900	1.14138	1.14194	1.13175	1.12830	
December 2 2017	246.81397	1.14136	1.14192	1.13173	1.12828	
December 3 2017	246.80894	1.14133	1.14190	1.13171	1.12826	
December 4 2017	246.80390	1.14131	1.14187	1.13169	1.12823	
December 5 2017	246.79887	1.14129	1.14185	1.13166	1.12821	
December 6 2017	246.79384	1.14126	1.14183	1.13164	1.12819	
December 7 2017	246.78881	1.14124	1.14180	1.13162	1.12816	
December 8 2017	246.78377	1.14122	1.14178	1.13159	1.12814	
December 9 2017	246.77874	1.14119	1.14176	1.13157	1.12812	
December 10 2017	246.77371	1.14117	1.14173	1.13155	1.12810	
December 11 2017	246.76868	1.14115	1.14171	1.13152	1.12807	
December 12 2017	246.76365	1.14112	1.14169	1.13150	1.12805	
December 13 2017	246.75861	1.14110	1.14166	1.13148	1.12803	
December 14 2017	246.75358	1.14108	1.14164	1.13145	1.12800	
December 15 2017	246.74855	1.14105	1.14162	1.13143	1.12798	
December 16 2017	246.74352	1.14103	1.14159	1.13141	1.12796	
December 17 2017	246.73848	1.14101	1.14157	1.13139	1.12793	
December 18 2017	246.73345	1.14098	1.14155	1.13136	1.12791	
December 19 2017	246.72842	1.14096	1.14152	1.13134	1.12789	
December 20 2017	246.72339	1.14094	1.14150	1.13132	1.12787	
December 21 2017	246.71835	1.14091	1.14148	1.13129	1.12784	
December 22 2017	246.71332	1.14089	1.14145	1.13127	1.12782	
December 23 2017	246.70829	1.14087	1.14143	1.13125	1.12780	
December 24 2017	246.70326	1.14084	1.14141	1.13122	1.12777	
December 25 2017	246.69823	1.14082	1.14138	1.13120	1.12775	
December 26 2017	246.69319	1.14080	1.14136	1.13118	1.12773	
December 27 2017	246.68816	1.14078	1.14134	1.13115	1.12770	
December 28 2017	246.68313	1.14075	1.14131	1.13113	1.12768	
December 29 2017	246.67810	1.14073	1.14129	1.13111	1.12766	
December 30 2017	246.67306	1.14071	1.14127	1.13109	1.12764	
December 31 2017	246.66803	1.14068	1.14124	1.13106	1.12761	
<b>CPI-U (NSA) for:</b>	<b>August 2017</b>	<b>245.519</b>	<b>September 2017</b>	<b>246.819</b>	<b>October 2017</b>	<b>246.663</b>

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

Security: Description: CUSIP Number: Dated Date: Original Issue Date: Additional Issue Date(s):			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	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
Maturity Date: Ref CPI on Dated Date:			February 15, 2041 218.99100	July 15, 2021 225.38381	January 15, 2022 226.33474	February 15, 2042 225.96062
Date	Ref CPI	Index Ratio	Index Ratio	Index Ratio	Index Ratio	
December 1 2017	246.81900	1.12707	1.09511	1.09050	1.09231	
December 2 2017	246.81397	1.12705	1.09508	1.09048	1.09229	
December 3 2017	246.80894	1.12703	1.09506	1.09046	1.09227	
December 4 2017	246.80390	1.12700	1.09504	1.09044	1.09224	
December 5 2017	246.79887	1.12698	1.09502	1.09042	1.09222	
December 6 2017	246.79384	1.12696	1.09499	1.09039	1.09220	
December 7 2017	246.78881	1.12694	1.09497	1.09037	1.09218	
December 8 2017	246.78377	1.12691	1.09495	1.09035	1.09215	
December 9 2017	246.77874	1.12689	1.09493	1.09033	1.09213	
December 10 2017	246.77371	1.12687	1.09490	1.09030	1.09211	
December 11 2017	246.76868	1.12684	1.09488	1.09028	1.09209	
December 12 2017	246.76365	1.12682	1.09486	1.09026	1.09206	
December 13 2017	246.75861	1.12680	1.09484	1.09024	1.09204	
December 14 2017	246.75358	1.12677	1.09482	1.09022	1.09202	
December 15 2017	246.74855	1.12675	1.09479	1.09019	1.09200	
December 16 2017	246.74352	1.12673	1.09477	1.09017	1.09198	
December 17 2017	246.73848	1.12671	1.09475	1.09015	1.09195	
December 18 2017	246.73345	1.12668	1.09473	1.09013	1.09193	
December 19 2017	246.72842	1.12666	1.09470	1.09010	1.09191	
December 20 2017	246.72339	1.12664	1.09468	1.09008	1.09189	
December 21 2017	246.71835	1.12661	1.09466	1.09006	1.09186	
December 22 2017	246.71332	1.12659	1.09464	1.09004	1.09184	
December 23 2017	246.70829	1.12657	1.09461	1.09002	1.09182	
December 24 2017	246.70326	1.12655	1.09459	1.08999	1.09180	
December 25 2017	246.69823	1.12652	1.09457	1.08997	1.09178	
December 26 2017	246.69319	1.12650	1.09455	1.08995	1.09175	
December 27 2017	246.68816	1.12648	1.09452	1.08993	1.09173	
December 28 2017	246.68313	1.12645	1.09450	1.08990	1.09171	
December 29 2017	246.67810	1.12643	1.09448	1.08988	1.09169	
December 30 2017	246.67306	1.12641	1.09446	1.08986	1.09166	
December 31 2017	246.66803	1.12638	1.09444	1.08984	1.09164	
<b>CPI-U (NSA) for:</b>	<b>August 2017</b>	<b>245.519</b>	<b>September 2017</b>	<b>246.819</b>	<b>October 2017</b>	<b>246.663</b>

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

Security: Description: CUSIP Number: Dated Date: Original Issue Date: Additional Issue Date(s):			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	0-1/8% 5-Year TIPS Series X-2018 912828UX6 April 15, 2013 April 30, 2013 August 30, 2013 December 31, 2013
Maturity Date: Ref CPI on Dated Date:			July 15, 2022 229.96306	January 15, 2023 230.82203	February 15, 2043 229.91100	April 15, 2018 231.16013
Date	Ref CPI	Index Ratio	Index Ratio	Index Ratio	Index Ratio	
December 1 2017	246.81900	1.07330	1.06930	1.07354	1.06774	
December 2 2017	246.81397	1.07328	1.06928	1.07352	1.06772	
December 3 2017	246.80894	1.07325	1.06926	1.07350	1.06770	
December 4 2017	246.80390	1.07323	1.06924	1.07348	1.06768	
December 5 2017	246.79887	1.07321	1.06922	1.07345	1.06765	
December 6 2017	246.79384	1.07319	1.06920	1.07343	1.06763	
December 7 2017	246.78881	1.07317	1.06917	1.07341	1.06761	
December 8 2017	246.78377	1.07315	1.06915	1.07339	1.06759	
December 9 2017	246.77874	1.07312	1.06913	1.07337	1.06757	
December 10 2017	246.77371	1.07310	1.06911	1.07334	1.06754	
December 11 2017	246.76868	1.07308	1.06909	1.07332	1.06752	
December 12 2017	246.76365	1.07306	1.06906	1.07330	1.06750	
December 13 2017	246.75861	1.07304	1.06904	1.07328	1.06748	
December 14 2017	246.75358	1.07301	1.06902	1.07326	1.06746	
December 15 2017	246.74855	1.07299	1.06900	1.07324	1.06744	
December 16 2017	246.74352	1.07297	1.06898	1.07321	1.06741	
December 17 2017	246.73848	1.07295	1.06896	1.07319	1.06739	
December 18 2017	246.73345	1.07293	1.06893	1.07317	1.06737	
December 19 2017	246.72842	1.07290	1.06891	1.07315	1.06735	
December 20 2017	246.72339	1.07288	1.06889	1.07313	1.06733	
December 21 2017	246.71835	1.07286	1.06887	1.07310	1.06730	
December 22 2017	246.71332	1.07284	1.06885	1.07308	1.06728	
December 23 2017	246.70829	1.07282	1.06882	1.07306	1.06726	
December 24 2017	246.70326	1.07280	1.06880	1.07304	1.06724	
December 25 2017	246.69823	1.07277	1.06878	1.07302	1.06722	
December 26 2017	246.69319	1.07275	1.06876	1.07299	1.06720	
December 27 2017	246.68816	1.07273	1.06874	1.07297	1.06717	
December 28 2017	246.68313	1.07271	1.06872	1.07295	1.06715	
December 29 2017	246.67810	1.07269	1.06869	1.07293	1.06713	
December 30 2017	246.67306	1.07266	1.06867	1.07291	1.06711	
December 31 2017	246.66803	1.07264	1.06865	1.07288	1.06709	
<b>CPI-U (NSA) for:</b>	<b>August 2017</b>	<b>245.519</b>	<b>September 2017</b>	<b>246.819</b>	<b>October 2017</b>	<b>246.663</b>

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

Security: Description: CUSIP Number: Dated Date: Original Issue Date: Additional Issue Date(s):			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	0-1/8% 5-Year TIPS Series X-2019 912828C99 April 15, 2014 April 30, 2014 August 29, 2014 December 31, 2014
Maturity Date: Ref CPI on Dated Date:			July 15, 2023 232.71797	January 15, 2024 233.33058	February 15, 2044 233.05900	April 15, 2019 234.31967
Date	Ref CPI	Index Ratio	Index Ratio	Index Ratio	Index Ratio	
December 1 2017	246.81900	1.06059	1.05781	1.05904	1.05334	
December 2 2017	246.81397	1.06057	1.05779	1.05902	1.05332	
December 3 2017	246.80894	1.06055	1.05777	1.05900	1.05330	
December 4 2017	246.80390	1.06053	1.05774	1.05898	1.05328	
December 5 2017	246.79887	1.06051	1.05772	1.05895	1.05326	
December 6 2017	246.79384	1.06048	1.05770	1.05893	1.05324	
December 7 2017	246.78881	1.06046	1.05768	1.05891	1.05321	
December 8 2017	246.78377	1.06044	1.05766	1.05889	1.05319	
December 9 2017	246.77874	1.06042	1.05764	1.05887	1.05317	
December 10 2017	246.77371	1.06040	1.05761	1.05885	1.05315	
December 11 2017	246.76868	1.06038	1.05759	1.05882	1.05313	
December 12 2017	246.76365	1.06035	1.05757	1.05880	1.05311	
December 13 2017	246.75861	1.06033	1.05755	1.05878	1.05309	
December 14 2017	246.75358	1.06031	1.05753	1.05876	1.05306	
December 15 2017	246.74855	1.06029	1.05751	1.05874	1.05304	
December 16 2017	246.74352	1.06027	1.05748	1.05872	1.05302	
December 17 2017	246.73848	1.06025	1.05746	1.05870	1.05300	
December 18 2017	246.73345	1.06023	1.05744	1.05867	1.05298	
December 19 2017	246.72842	1.06020	1.05742	1.05865	1.05296	
December 20 2017	246.72339	1.06018	1.05740	1.05863	1.05294	
December 21 2017	246.71835	1.06016	1.05738	1.05861	1.05291	
December 22 2017	246.71332	1.06014	1.05736	1.05859	1.05289	
December 23 2017	246.70829	1.06012	1.05733	1.05857	1.05287	
December 24 2017	246.70326	1.06010	1.05731	1.05854	1.05285	
December 25 2017	246.69823	1.06007	1.05729	1.05852	1.05283	
December 26 2017	246.69319	1.06005	1.05727	1.05850	1.05281	
December 27 2017	246.68816	1.06003	1.05725	1.05848	1.05278	
December 28 2017	246.68313	1.06001	1.05723	1.05846	1.05276	
December 29 2017	246.67810	1.05999	1.05720	1.05844	1.05274	
December 30 2017	246.67306	1.05997	1.05718	1.05841	1.05272	
December 31 2017	246.66803	1.05994	1.05716	1.05839	1.05270	
<b>CPI-U (NSA) for:</b>	<b>August 2017</b>	<b>245.519</b>	<b>September 2017</b>	<b>246.819</b>	<b>October 2017</b>	<b>246.663</b>

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

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	0-1/8% 5-Year TIPS Series X-2020 912828K33 April 15, 2015 April 30, 2015 August 31, 2015 December 31, 2015
Maturity Date: Ref CPI on Dated Date:			July 15, 2024 237.44594	January 15, 2025 236.85403	February 15, 2045 235.48150	April 15, 2020 234.18067
Date	Ref CPI	Index Ratio	Index Ratio	Index Ratio	Index Ratio	
December 1 2017	246.81900	1.03947	1.04207	1.04815	1.05397	
December 2 2017	246.81397	1.03945	1.04205	1.04812	1.05395	
December 3 2017	246.80894	1.03943	1.04203	1.04810	1.05393	
December 4 2017	246.80390	1.03941	1.04201	1.04808	1.05390	
December 5 2017	246.79887	1.03939	1.04199	1.04806	1.05388	
December 6 2017	246.79384	1.03937	1.04197	1.04804	1.05386	
December 7 2017	246.78881	1.03935	1.04194	1.04802	1.05384	
December 8 2017	246.78377	1.03933	1.04192	1.04800	1.05382	
December 9 2017	246.77874	1.03930	1.04190	1.04798	1.05380	
December 10 2017	246.77371	1.03928	1.04188	1.04795	1.05377	
December 11 2017	246.76868	1.03926	1.04186	1.04793	1.05375	
December 12 2017	246.76365	1.03924	1.04184	1.04791	1.05373	
December 13 2017	246.75861	1.03922	1.04182	1.04789	1.05371	
December 14 2017	246.75358	1.03920	1.04180	1.04787	1.05369	
December 15 2017	246.74855	1.03918	1.04177	1.04785	1.05367	
December 16 2017	246.74352	1.03916	1.04175	1.04783	1.05365	
December 17 2017	246.73848	1.03914	1.04173	1.04780	1.05362	
December 18 2017	246.73345	1.03911	1.04171	1.04778	1.05360	
December 19 2017	246.72842	1.03909	1.04169	1.04776	1.05358	
December 20 2017	246.72339	1.03907	1.04167	1.04774	1.05356	
December 21 2017	246.71835	1.03905	1.04165	1.04772	1.05354	
December 22 2017	246.71332	1.03903	1.04163	1.04770	1.05352	
December 23 2017	246.70829	1.03901	1.04160	1.04768	1.05350	
December 24 2017	246.70326	1.03899	1.04158	1.04765	1.05347	
December 25 2017	246.69823	1.03897	1.04156	1.04763	1.05345	
December 26 2017	246.69319	1.03894	1.04154	1.04761	1.05343	
December 27 2017	246.68816	1.03892	1.04152	1.04759	1.05341	
December 28 2017	246.68313	1.03890	1.04150	1.04757	1.05339	
December 29 2017	246.67810	1.03888	1.04148	1.04755	1.05337	
December 30 2017	246.67306	1.03886	1.04146	1.04753	1.05335	
December 31 2017	246.66803	1.03884	1.04143	1.04750	1.05332	
<b>CPI-U (NSA) for:</b>	<b>August 2017</b>	<b>245.519</b>	<b>September 2017</b>	<b>246.819</b>	<b>October 2017</b>	<b>246.663</b>



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

<b>Security:</b>			<b>0-3/8% 10-Year TIPS</b>	<b>0-5/8% 10-Year TIPS</b>	<b>1% 30-Year TIPS</b>	<b>0-1/8% 5-Year TIPS</b>		
<b>Description:</b>			<b>Series D-2025</b>	<b>Series A-2026</b>	<b>TIPS of February 2046</b>	<b>Series X-2021</b>		
<b>CUSIP Number:</b>			<b>912828XL9</b>	<b>912828N71</b>	<b>912810RR1</b>	<b>912828Q60</b>		
<b>Dated Date:</b>			<b>July 15, 2015</b>	<b>January 15, 2016</b>	<b>February 15, 2016</b>	<b>April 15, 2016</b>		
<b>Original Issue Date:</b>			<b>July 31, 2015</b>	<b>January 29, 2016</b>	<b>February 29, 2016</b>	<b>April 29, 2016</b>		
<b>Additional Issue Date(s):</b>			<b>September 30, 2015</b>	<b>March 31, 2016</b>	<b>June 30, 2016</b>	<b>August 31, 2016</b>		
			<b>November 30, 2015</b>	<b>May 31, 2016</b>	<b>October 31, 2016</b>	<b>December 30, 2016</b>		
<b>Maturity Date:</b>			<b>July 15, 2025</b>	<b>January 15, 2026</b>	<b>February 15, 2046</b>	<b>April 15, 2021</b>		
<b>Ref CPI on Dated Date:</b>			<b>237.14365</b>	<b>237.61129</b>	<b>236.94448</b>	<b>237.00700</b>		
<b>Date</b>			<b>Ref CPI</b>	<b>Index Ratio</b>	<b>Index Ratio</b>	<b>Index Ratio</b>	<b>Index Ratio</b>	
December	1	2017	246.81900	1.04080	1.03875	1.04167	1.04140	
December	2	2017	246.81397	1.04078	1.03873	1.04165	1.04138	
December	3	2017	246.80894	1.04076	1.03871	1.04163	1.04136	
December	4	2017	246.80390	1.04074	1.03869	1.04161	1.04134	
December	5	2017	246.79887	1.04071	1.03867	1.04159	1.04131	
December	6	2017	246.79384	1.04069	1.03865	1.04157	1.04129	
December	7	2017	246.78881	1.04067	1.03862	1.04155	1.04127	
December	8	2017	246.78377	1.04065	1.03860	1.04153	1.04125	
December	9	2017	246.77874	1.04063	1.03858	1.04150	1.04123	
December	10	2017	246.77371	1.04061	1.03856	1.04148	1.04121	
December	11	2017	246.76868	1.04059	1.03854	1.04146	1.04119	
December	12	2017	246.76365	1.04057	1.03852	1.04144	1.04117	
December	13	2017	246.75861	1.04054	1.03850	1.04142	1.04114	
December	14	2017	246.75358	1.04052	1.03848	1.04140	1.04112	
December	15	2017	246.74855	1.04050	1.03845	1.04138	1.04110	
December	16	2017	246.74352	1.04048	1.03843	1.04136	1.04108	
December	17	2017	246.73848	1.04046	1.03841	1.04133	1.04106	
December	18	2017	246.73345	1.04044	1.03839	1.04131	1.04104	
December	19	2017	246.72842	1.04042	1.03837	1.04129	1.04102	
December	20	2017	246.72339	1.04040	1.03835	1.04127	1.04100	
December	21	2017	246.71835	1.04038	1.03833	1.04125	1.04097	
December	22	2017	246.71332	1.04035	1.03831	1.04123	1.04095	
December	23	2017	246.70829	1.04033	1.03829	1.04121	1.04093	
December	24	2017	246.70326	1.04031	1.03826	1.04119	1.04091	
December	25	2017	246.69823	1.04029	1.03824	1.04116	1.04089	
December	26	2017	246.69319	1.04027	1.03822	1.04114	1.04087	
December	27	2017	246.68816	1.04025	1.03820	1.04112	1.04085	
December	28	2017	246.68313	1.04023	1.03818	1.04110	1.04083	
December	29	2017	246.67810	1.04021	1.03816	1.04108	1.04081	
December	30	2017	246.67306	1.04018	1.03814	1.04106	1.04078	
December	31	2017	246.66803	1.04016	1.03812	1.04104	1.04076	
<b>CPI-U (NSA) for:</b>			<b>August 2017</b>	<b>245.519</b>	<b>September 2017</b>	<b>246.819</b>	<b>October 2017</b>	<b>246.663</b>

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

Security: Description: CUSIP Number: Dated Date: Original Issue Date: Additional Issue Date(s):			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	0-1/8% 5-Year TIPS Series X-2022 912828X39 April 15, 2017 April 28, 2017 August 31, 2017
Maturity Date: Ref CPI on Dated Date:			July 15, 2026 239.70132	January 15, 2027 241.55919	February 15, 2047 241.39250	April 15, 2022 243.19553
Date	Ref CPI	Index Ratio	Index Ratio	Index Ratio	Index Ratio	
December 1 2017	246.81900	1.02969	1.02177	1.02248	1.01490	
December 2 2017	246.81397	1.02967	1.02175	1.02246	1.01488	
December 3 2017	246.80894	1.02965	1.02173	1.02244	1.01486	
December 4 2017	246.80390	1.02963	1.02171	1.02242	1.01484	
December 5 2017	246.79887	1.02961	1.02169	1.02240	1.01482	
December 6 2017	246.79384	1.02959	1.02167	1.02238	1.01480	
December 7 2017	246.78881	1.02957	1.02165	1.02235	1.01478	
December 8 2017	246.78377	1.02955	1.02163	1.02233	1.01475	
December 9 2017	246.77874	1.02953	1.02161	1.02231	1.01473	
December 10 2017	246.77371	1.02951	1.02159	1.02229	1.01471	
December 11 2017	246.76868	1.02948	1.02157	1.02227	1.01469	
December 12 2017	246.76365	1.02946	1.02155	1.02225	1.01467	
December 13 2017	246.75861	1.02944	1.02152	1.02223	1.01465	
December 14 2017	246.75358	1.02942	1.02150	1.02221	1.01463	
December 15 2017	246.74855	1.02940	1.02148	1.02219	1.01461	
December 16 2017	246.74352	1.02938	1.02146	1.02217	1.01459	
December 17 2017	246.73848	1.02936	1.02144	1.02215	1.01457	
December 18 2017	246.73345	1.02934	1.02142	1.02213	1.01455	
December 19 2017	246.72842	1.02932	1.02140	1.02210	1.01453	
December 20 2017	246.72339	1.02930	1.02138	1.02208	1.01451	
December 21 2017	246.71835	1.02927	1.02136	1.02206	1.01449	
December 22 2017	246.71332	1.02925	1.02134	1.02204	1.01446	
December 23 2017	246.70829	1.02923	1.02132	1.02202	1.01444	
December 24 2017	246.70326	1.02921	1.02130	1.02200	1.01442	
December 25 2017	246.69823	1.02919	1.02127	1.02198	1.01440	
December 26 2017	246.69319	1.02917	1.02125	1.02196	1.01438	
December 27 2017	246.68816	1.02915	1.02123	1.02194	1.01436	
December 28 2017	246.68313	1.02913	1.02121	1.02192	1.01434	
December 29 2017	246.67810	1.02911	1.02119	1.02190	1.01432	
December 30 2017	246.67306	1.02909	1.02117	1.02188	1.01430	
December 31 2017	246.66803	1.02906	1.02115	1.02185	1.01428	
<b>CPI-U (NSA) for:</b>	<b>August 2017</b>	<b>245.519</b>	<b>September 2017</b>	<b>246.819</b>	<b>October 2017</b>	<b>246.663</b>

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

<b>Security:</b> <b>Description:</b> <b>CUSIP Number:</b> <b>Dated Date:</b> <b>Original Issue Date:</b> <b>Additional Issue Date(s):</b>			<b>0-3/8% 10-Year TIPS</b> <b>Series D-2027</b> <b>9128282L3</b> <b>July 15, 2017</b> <b>July 31, 2017</b> <b>September 29, 2017</b> <b>November 30, 2017</b>					
<b>Maturity Date:</b> <b>Ref CPI on Dated Date:</b>			<b>July 15, 2027</b> <b>244.61839</b>					
Date			Ref CPI	Index Ratio				
December	1	2017	246.81900	1.00900				
December	2	2017	246.81397	1.00898				
December	3	2017	246.80894	1.00895				
December	4	2017	246.80390	1.00893				
December	5	2017	246.79887	1.00891				
December	6	2017	246.79384	1.00889				
December	7	2017	246.78881	1.00887				
December	8	2017	246.78377	1.00885				
December	9	2017	246.77874	1.00883				
December	10	2017	246.77371	1.00881				
December	11	2017	246.76868	1.00879				
December	12	2017	246.76365	1.00877				
December	13	2017	246.75861	1.00875				
December	14	2017	246.75358	1.00873				
December	15	2017	246.74855	1.00871				
December	16	2017	246.74352	1.00869				
December	17	2017	246.73848	1.00867				
December	18	2017	246.73345	1.00865				
December	19	2017	246.72842	1.00863				
December	20	2017	246.72339	1.00861				
December	21	2017	246.71835	1.00858				
December	22	2017	246.71332	1.00856				
December	23	2017	246.70829	1.00854				
December	24	2017	246.70326	1.00852				
December	25	2017	246.69823	1.00850				
December	26	2017	246.69319	1.00848				
December	27	2017	246.68816	1.00846				
December	28	2017	246.68313	1.00844				
December	29	2017	246.67810	1.00842				
December	30	2017	246.67306	1.00840				
December	31	2017	246.66803	1.00838				
<b>CPI-U (NSA) for:</b>			<b>August 2017</b>	<b>245.519</b>	<b>September 2017</b>	<b>246.819</b>	<b>October 2017</b>	<b>246.663</b>