

**TREASURY INFLATION-PROTECTED SECURITIES (TIPS)**  
**Ref CPI and Index Ratios for**  
**December 2016**

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	October 15, 2001	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 2016	241.42800	1.49269	1.46860	1.36016	1.28081	
December 2 2016	241.43771	1.49275	1.46866	1.36021	1.28086	
December 3 2016	241.44742	1.49281	1.46872	1.36027	1.28091	
December 4 2016	241.45713	1.49287	1.46878	1.36032	1.28096	
December 5 2016	241.46684	1.49293	1.46884	1.36038	1.28101	
December 6 2016	241.47655	1.49299	1.46890	1.36043	1.28106	
December 7 2016	241.48626	1.49305	1.46895	1.36049	1.28112	
December 8 2016	241.49597	1.49311	1.46901	1.36054	1.28117	
December 9 2016	241.50568	1.49317	1.46907	1.36060	1.28122	
December 10 2016	241.51539	1.49323	1.46913	1.36065	1.28127	
December 11 2016	241.52510	1.49329	1.46919	1.36070	1.28132	
December 12 2016	241.53481	1.49335	1.46925	1.36076	1.28137	
December 13 2016	241.54452	1.49341	1.46931	1.36081	1.28143	
December 14 2016	241.55423	1.49347	1.46937	1.36087	1.28148	
December 15 2016	241.56394	1.49353	1.46943	1.36092	1.28153	
December 16 2016	241.57365	1.49359	1.46949	1.36098	1.28158	
December 17 2016	241.58335	1.49365	1.46954	1.36103	1.28163	
December 18 2016	241.59306	1.49371	1.46960	1.36109	1.28168	
December 19 2016	241.60277	1.49377	1.46966	1.36114	1.28173	
December 20 2016	241.61248	1.49383	1.46972	1.36120	1.28179	
December 21 2016	241.62219	1.49389	1.46978	1.36125	1.28184	
December 22 2016	241.63190	1.49395	1.46984	1.36131	1.28189	
December 23 2016	241.64161	1.49401	1.46990	1.36136	1.28194	
December 24 2016	241.65132	1.49407	1.46996	1.36142	1.28199	
December 25 2016	241.66103	1.49413	1.47002	1.36147	1.28204	
December 26 2016	241.67074	1.49419	1.47008	1.36153	1.28209	
December 27 2016	241.68045	1.49425	1.47014	1.36158	1.28215	
December 28 2016	241.69016	1.49431	1.47019	1.36163	1.28220	
December 29 2016	241.69987	1.49437	1.47025	1.36169	1.28225	
December 30 2016	241.70958	1.49443	1.47031	1.36174	1.28230	
December 31 2016	241.71929	1.49449	1.47037	1.36180	1.28235	
<b>CPI-U (NSA) for:</b>			<b>August 2016 240.853</b>	<b>September 2016 241.428</b>	<b>October 2016 241.729</b>	

**TREASURY INFLATION-PROTECTED SECURITIES (TIPS)**  
**Ref CPI and Index Ratios for**  
**December 2016**

<b>Security:</b>			<b>2% 20-Year TIPS</b>	<b>2-3/8% 10-Year TIPS</b>	<b>2-3/8% 20-Year TIPS</b>	<b>2-5/8% 10-Year TIPS</b>
<b>Description:</b>			<b>TIPS of January 2026</b>	<b>Series A-2017</b>	<b>TIPS of January 2027</b>	<b>Series D-2017</b>
<b>CUSIP Number:</b>			<b>912810FS2</b>	<b>912828GD6</b>	<b>912810PS1</b>	<b>912828GX2</b>
<b>Dated Date:</b>			<b>January 15, 2006</b>	<b>January 15, 2007</b>	<b>January 15, 2007</b>	<b>July 15, 2007</b>
<b>Original Issue Date:</b>			<b>January 31, 2006</b>	<b>January 16, 2007</b>	<b>January 31, 2007</b>	<b>July 16, 2007</b>
<b>Additional Issue Date(s):</b>			<b>July 31, 2006</b>	<b>April 16, 2007</b>	<b>July 31, 2007</b>	<b>October 15, 2007</b>
<b>Maturity Date:</b>			<b>January 15, 2026</b>	<b>January 15, 2017</b>	<b>January 15, 2027</b>	<b>July 15, 2017</b>
<b>Ref CPI on Dated Date:</b>			<b>198.47742</b>	<b>201.66452</b>	<b>201.66452</b>	<b>207.25639</b>
<b>Date</b>	<b>Ref CPI</b>	<b>Index Ratio</b>	<b>Index Ratio</b>	<b>Index Ratio</b>	<b>Index Ratio</b>	<b>Index Ratio</b>
December 1 2016	241.42800	1.21640	1.19718	1.19718	1.16488	
December 2 2016	241.43771	1.21645	1.19722	1.19722	1.16492	
December 3 2016	241.44742	1.21650	1.19727	1.19727	1.16497	
December 4 2016	241.45713	1.21655	1.19732	1.19732	1.16502	
December 5 2016	241.46684	1.21660	1.19737	1.19737	1.16506	
December 6 2016	241.47655	1.21664	1.19742	1.19742	1.16511	
December 7 2016	241.48626	1.21669	1.19747	1.19747	1.16516	
December 8 2016	241.49597	1.21674	1.19751	1.19751	1.16520	
December 9 2016	241.50568	1.21679	1.19756	1.19756	1.16525	
December 10 2016	241.51539	1.21684	1.19761	1.19761	1.16530	
December 11 2016	241.52510	1.21689	1.19766	1.19766	1.16534	
December 12 2016	241.53481	1.21694	1.19771	1.19771	1.16539	
December 13 2016	241.54452	1.21699	1.19775	1.19775	1.16544	
December 14 2016	241.55423	1.21704	1.19780	1.19780	1.16549	
December 15 2016	241.56394	1.21709	1.19785	1.19785	1.16553	
December 16 2016	241.57365	1.21713	1.19790	1.19790	1.16558	
December 17 2016	241.58335	1.21718	1.19795	1.19795	1.16563	
December 18 2016	241.59306	1.21723	1.19799	1.19799	1.16567	
December 19 2016	241.60277	1.21728	1.19804	1.19804	1.16572	
December 20 2016	241.61248	1.21733	1.19809	1.19809	1.16577	
December 21 2016	241.62219	1.21738	1.19814	1.19814	1.16581	
December 22 2016	241.63190	1.21743	1.19819	1.19819	1.16586	
December 23 2016	241.64161	1.21748	1.19824	1.19824	1.16591	
December 24 2016	241.65132	1.21753	1.19828	1.19828	1.16595	
December 25 2016	241.66103	1.21757	1.19833	1.19833	1.16600	
December 26 2016	241.67074	1.21762	1.19838	1.19838	1.16605	
December 27 2016	241.68045	1.21767	1.19843	1.19843	1.16609	
December 28 2016	241.69016	1.21772	1.19848	1.19848	1.16614	
December 29 2016	241.69987	1.21777	1.19852	1.19852	1.16619	
December 30 2016	241.70958	1.21782	1.19857	1.19857	1.16623	
December 31 2016	241.71929	1.21787	1.19862	1.19862	1.16628	
<b>CPI-U (NSA) for:</b>	<b>August 2016</b>	<b>240.853</b>	<b>September 2016</b>	<b>241.428</b>	<b>October 2016</b>	<b>241.729</b>

**TREASURY INFLATION-PROTECTED SECURITIES (TIPS)**  
**Ref CPI and Index Ratios for**  
**December 2016**

<b>Security:</b>			<b>1-5/8% 10-Year TIPS</b>	<b>1-3/4% 20-Year TIPS</b>	<b>1-3/8% 10-Year TIPS</b>	<b>2-1/8% 10-Year TIPS</b>
<b>Description:</b>			<b>Series A-2018</b>	<b>TIPS of January 2028</b>	<b>Series D-2018</b>	<b>Series A-2019</b>
<b>CUSIP Number:</b>			<b>912828HN3</b>	<b>912810PV4</b>	<b>912828JE1</b>	<b>912828JX9</b>
<b>Dated Date:</b>			<b>January 15, 2008</b>	<b>January 15, 2008</b>	<b>July 15, 2008</b>	<b>January 15, 2009</b>
<b>Original Issue Date:</b>			<b>January 15, 2008</b>	<b>January 31, 2008</b>	<b>July 15, 2008</b>	<b>January 15, 2009</b>
<b>Additional Issue Date(s):</b>			<b>April 15, 2008</b>	<b>July 31, 2008</b>	<b>October 15, 2008</b>	<b>April 15, 2009</b>
<b>Maturity Date:</b>			<b>January 15, 2018</b>	<b>January 15, 2028</b>	<b>July 15, 2018</b>	<b>January 15, 2019</b>
<b>Ref CPI on Dated Date:</b>			<b>209.49645</b>	<b>209.49645</b>	<b>215.63997</b>	<b>214.69971</b>
<b>Date</b>	<b>Ref CPI</b>	<b>Index Ratio</b>	<b>Index Ratio</b>	<b>Index Ratio</b>	<b>Index Ratio</b>	<b>Index Ratio</b>
December 1 2016	241.42800	1.15242	1.15242	1.11959	1.12449	
December 2 2016	241.43771	1.15247	1.15247	1.11963	1.12454	
December 3 2016	241.44742	1.15251	1.15251	1.11968	1.12458	
December 4 2016	241.45713	1.15256	1.15256	1.11972	1.12463	
December 5 2016	241.46684	1.15261	1.15261	1.11977	1.12467	
December 6 2016	241.47655	1.15265	1.15265	1.11981	1.12472	
December 7 2016	241.48626	1.15270	1.15270	1.11986	1.12476	
December 8 2016	241.49597	1.15274	1.15274	1.11990	1.12481	
December 9 2016	241.50568	1.15279	1.15279	1.11995	1.12485	
December 10 2016	241.51539	1.15284	1.15284	1.11999	1.12490	
December 11 2016	241.52510	1.15288	1.15288	1.12004	1.12494	
December 12 2016	241.53481	1.15293	1.15293	1.12008	1.12499	
December 13 2016	241.54452	1.15298	1.15298	1.12013	1.12503	
December 14 2016	241.55423	1.15302	1.15302	1.12017	1.12508	
December 15 2016	241.56394	1.15307	1.15307	1.12022	1.12512	
December 16 2016	241.57365	1.15312	1.15312	1.12026	1.12517	
December 17 2016	241.58335	1.15316	1.15316	1.12031	1.12522	
December 18 2016	241.59306	1.15321	1.15321	1.12035	1.12526	
December 19 2016	241.60277	1.15325	1.15325	1.12040	1.12531	
December 20 2016	241.61248	1.15330	1.15330	1.12044	1.12535	
December 21 2016	241.62219	1.15335	1.15335	1.12049	1.12540	
December 22 2016	241.63190	1.15339	1.15339	1.12053	1.12544	
December 23 2016	241.64161	1.15344	1.15344	1.12058	1.12549	
December 24 2016	241.65132	1.15349	1.15349	1.12062	1.12553	
December 25 2016	241.66103	1.15353	1.15353	1.12067	1.12558	
December 26 2016	241.67074	1.15358	1.15358	1.12071	1.12562	
December 27 2016	241.68045	1.15363	1.15363	1.12076	1.12567	
December 28 2016	241.69016	1.15367	1.15367	1.12080	1.12571	
December 29 2016	241.69987	1.15372	1.15372	1.12085	1.12576	
December 30 2016	241.70958	1.15376	1.15376	1.12089	1.12580	
December 31 2016	241.71929	1.15381	1.15381	1.12094	1.12585	
<b>CPI-U (NSA) for:</b>			<b>August 2016 240.853</b>	<b>September 2016 241.428</b>	<b>October 2016 241.729</b>	

**TREASURY INFLATION-PROTECTED SECURITIES (TIPS)**  
**Ref CPI and Index Ratios for**  
**December 2016**

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	
December 1 2016	241.42800	1.12449	1.13071	1.11645	1.11700	
December 2 2016	241.43771	1.12454	1.13076	1.11650	1.11705	
December 3 2016	241.44742	1.12458	1.13080	1.11654	1.11709	
December 4 2016	241.45713	1.12463	1.13085	1.11658	1.11714	
December 5 2016	241.46684	1.12467	1.13090	1.11663	1.11718	
December 6 2016	241.47655	1.12472	1.13094	1.11667	1.11723	
December 7 2016	241.48626	1.12476	1.13099	1.11672	1.11727	
December 8 2016	241.49597	1.12481	1.13103	1.11676	1.11732	
December 9 2016	241.50568	1.12485	1.13108	1.11681	1.11736	
December 10 2016	241.51539	1.12490	1.13112	1.11685	1.11741	
December 11 2016	241.52510	1.12494	1.13117	1.11690	1.11745	
December 12 2016	241.53481	1.12499	1.13121	1.11694	1.11749	
December 13 2016	241.54452	1.12503	1.13126	1.11699	1.11754	
December 14 2016	241.55423	1.12508	1.13131	1.11703	1.11758	
December 15 2016	241.56394	1.12512	1.13135	1.11708	1.11763	
December 16 2016	241.57365	1.12517	1.13140	1.11712	1.11767	
December 17 2016	241.58335	1.12522	1.13144	1.11717	1.11772	
December 18 2016	241.59306	1.12526	1.13149	1.11721	1.11776	
December 19 2016	241.60277	1.12531	1.13153	1.11726	1.11781	
December 20 2016	241.61248	1.12535	1.13158	1.11730	1.11785	
December 21 2016	241.62219	1.12540	1.13162	1.11735	1.11790	
December 22 2016	241.63190	1.12544	1.13167	1.11739	1.11794	
December 23 2016	241.64161	1.12549	1.13171	1.11744	1.11799	
December 24 2016	241.65132	1.12553	1.13176	1.11748	1.11803	
December 25 2016	241.66103	1.12558	1.13181	1.11753	1.11808	
December 26 2016	241.67074	1.12562	1.13185	1.11757	1.11812	
December 27 2016	241.68045	1.12567	1.13190	1.11762	1.11817	
December 28 2016	241.69016	1.12571	1.13194	1.11766	1.11821	
December 29 2016	241.69987	1.12576	1.13199	1.11771	1.11826	
December 30 2016	241.70958	1.12580	1.13203	1.11775	1.11830	
December 31 2016	241.71929	1.12585	1.13208	1.11780	1.11835	
<b>CPI-U (NSA) for:</b>	<b>August 2016</b>	<b>240.853</b>	<b>September 2016</b>	<b>241.428</b>	<b>October 2016</b>	<b>241.729</b>

**TREASURY INFLATION-PROTECTED SECURITIES (TIPS)**  
**Ref CPI and Index Ratios for**  
**December 2016**

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	
December 1 2016	241.42800	1.10703	1.10366	1.10246	1.07119	
December 2 2016	241.43771	1.10708	1.10370	1.10250	1.07123	
December 3 2016	241.44742	1.10712	1.10375	1.10254	1.07127	
December 4 2016	241.45713	1.10717	1.10379	1.10259	1.07132	
December 5 2016	241.46684	1.10721	1.10384	1.10263	1.07136	
December 6 2016	241.47655	1.10726	1.10388	1.10268	1.07140	
December 7 2016	241.48626	1.10730	1.10392	1.10272	1.07144	
December 8 2016	241.49597	1.10735	1.10397	1.10277	1.07149	
December 9 2016	241.50568	1.10739	1.10401	1.10281	1.07153	
December 10 2016	241.51539	1.10744	1.10406	1.10286	1.07157	
December 11 2016	241.52510	1.10748	1.10410	1.10290	1.07162	
December 12 2016	241.53481	1.10752	1.10415	1.10294	1.07166	
December 13 2016	241.54452	1.10757	1.10419	1.10299	1.07170	
December 14 2016	241.55423	1.10761	1.10424	1.10303	1.07175	
December 15 2016	241.56394	1.10766	1.10428	1.10308	1.07179	
December 16 2016	241.57365	1.10770	1.10432	1.10312	1.07183	
December 17 2016	241.58335	1.10775	1.10437	1.10317	1.07188	
December 18 2016	241.59306	1.10779	1.10441	1.10321	1.07192	
December 19 2016	241.60277	1.10784	1.10446	1.10325	1.07196	
December 20 2016	241.61248	1.10788	1.10450	1.10330	1.07200	
December 21 2016	241.62219	1.10793	1.10455	1.10334	1.07205	
December 22 2016	241.63190	1.10797	1.10459	1.10339	1.07209	
December 23 2016	241.64161	1.10801	1.10463	1.10343	1.07213	
December 24 2016	241.65132	1.10806	1.10468	1.10348	1.07218	
December 25 2016	241.66103	1.10810	1.10472	1.10352	1.07222	
December 26 2016	241.67074	1.10815	1.10477	1.10356	1.07226	
December 27 2016	241.68045	1.10819	1.10481	1.10361	1.07231	
December 28 2016	241.69016	1.10824	1.10486	1.10365	1.07235	
December 29 2016	241.69987	1.10828	1.10490	1.10370	1.07239	
December 30 2016	241.70958	1.10833	1.10495	1.10374	1.07244	
December 31 2016	241.71929	1.10837	1.10499	1.10379	1.07248	
<b>CPI-U (NSA) for:</b>	<b>August 2016</b>	<b>240.853</b>	<b>September 2016</b>	<b>241.428</b>	<b>October 2016</b>	<b>241.729</b>

**TREASURY INFLATION-PROTECTED SECURITIES (TIPS)**  
**Ref CPI and Index Ratios for**  
**December 2016**

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% 5-Year TIPS Series X-2017 912828SQ4 April 15, 2012 April 30, 2012 August 31, 2012 December 31, 2012	0-1/8% 10-Year TIPS Series D-2022 912828TE0 July 15, 2012 July 31, 2012 September 28, 2012 November 30, 2012
Maturity Date: Ref CPI on Dated Date:			January 15, 2022 226.33474	February 15, 2042 225.96062	April 15, 2017 227.13073	July 15, 2022 229.96306
Date	Ref CPI	Index Ratio	Index Ratio	Index Ratio	Index Ratio	
December 1 2016	241.42800	1.06669	1.06845	1.06295	1.04986	
December 2 2016	241.43771	1.06673	1.06849	1.06299	1.04990	
December 3 2016	241.44742	1.06677	1.06854	1.06303	1.04994	
December 4 2016	241.45713	1.06681	1.06858	1.06308	1.04998	
December 5 2016	241.46684	1.06686	1.06862	1.06312	1.05002	
December 6 2016	241.47655	1.06690	1.06867	1.06316	1.05007	
December 7 2016	241.48626	1.06694	1.06871	1.06320	1.05011	
December 8 2016	241.49597	1.06699	1.06875	1.06325	1.05015	
December 9 2016	241.50568	1.06703	1.06880	1.06329	1.05019	
December 10 2016	241.51539	1.06707	1.06884	1.06333	1.05024	
December 11 2016	241.52510	1.06711	1.06888	1.06337	1.05028	
December 12 2016	241.53481	1.06716	1.06892	1.06342	1.05032	
December 13 2016	241.54452	1.06720	1.06897	1.06346	1.05036	
December 14 2016	241.55423	1.06724	1.06901	1.06350	1.05040	
December 15 2016	241.56394	1.06729	1.06905	1.06355	1.05045	
December 16 2016	241.57365	1.06733	1.06910	1.06359	1.05049	
December 17 2016	241.58335	1.06737	1.06914	1.06363	1.05053	
December 18 2016	241.59306	1.06741	1.06918	1.06367	1.05057	
December 19 2016	241.60277	1.06746	1.06923	1.06372	1.05062	
December 20 2016	241.61248	1.06750	1.06927	1.06376	1.05066	
December 21 2016	241.62219	1.06754	1.06931	1.06380	1.05070	
December 22 2016	241.63190	1.06759	1.06935	1.06385	1.05074	
December 23 2016	241.64161	1.06763	1.06940	1.06389	1.05078	
December 24 2016	241.65132	1.06767	1.06944	1.06393	1.05083	
December 25 2016	241.66103	1.06772	1.06948	1.06397	1.05087	
December 26 2016	241.67074	1.06776	1.06953	1.06402	1.05091	
December 27 2016	241.68045	1.06780	1.06957	1.06406	1.05095	
December 28 2016	241.69016	1.06784	1.06961	1.06410	1.05100	
December 29 2016	241.69987	1.06789	1.06965	1.06414	1.05104	
December 30 2016	241.70958	1.06793	1.06970	1.06419	1.05108	
December 31 2016	241.71929	1.06797	1.06974	1.06423	1.05112	
<b>CPI-U (NSA) for:</b>	<b>August 2016</b>	<b>240.853</b>	<b>September 2016</b>	<b>241.428</b>	<b>October 2016</b>	<b>241.729</b>

**TREASURY INFLATION-PROTECTED SECURITIES (TIPS)**  
**Ref CPI and Index Ratios for**  
**December 2016**

Security: Description: CUSIP Number: Dated Date: Original Issue Date: Additional Issue Date(s):			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	0-3/8% 10-Year TIPS Series D-2023 912828VM9 July 15, 2013 July 31, 2013 September 30, 2013 November 29, 2013
Maturity Date: Ref CPI on Dated Date:			January 15, 2023 230.82203	February 15, 2043 229.91100	April 15, 2018 231.16013	July 15, 2023 232.71797
Date	Ref CPI	Index Ratio	Index Ratio	Index Ratio	Index Ratio	
December 1 2016	241.42800	1.04595	1.05009	1.04442	1.03743	
December 2 2016	241.43771	1.04599	1.05014	1.04446	1.03747	
December 3 2016	241.44742	1.04603	1.05018	1.04450	1.03751	
December 4 2016	241.45713	1.04607	1.05022	1.04454	1.03755	
December 5 2016	241.46684	1.04612	1.05026	1.04459	1.03759	
December 6 2016	241.47655	1.04616	1.05030	1.04463	1.03764	
December 7 2016	241.48626	1.04620	1.05035	1.04467	1.03768	
December 8 2016	241.49597	1.04624	1.05039	1.04471	1.03772	
December 9 2016	241.50568	1.04629	1.05043	1.04475	1.03776	
December 10 2016	241.51539	1.04633	1.05047	1.04480	1.03780	
December 11 2016	241.52510	1.04637	1.05052	1.04484	1.03784	
December 12 2016	241.53481	1.04641	1.05056	1.04488	1.03789	
December 13 2016	241.54452	1.04645	1.05060	1.04492	1.03793	
December 14 2016	241.55423	1.04650	1.05064	1.04496	1.03797	
December 15 2016	241.56394	1.04654	1.05068	1.04501	1.03801	
December 16 2016	241.57365	1.04658	1.05073	1.04505	1.03805	
December 17 2016	241.58335	1.04662	1.05077	1.04509	1.03809	
December 18 2016	241.59306	1.04666	1.05081	1.04513	1.03814	
December 19 2016	241.60277	1.04671	1.05085	1.04517	1.03818	
December 20 2016	241.61248	1.04675	1.05090	1.04522	1.03822	
December 21 2016	241.62219	1.04679	1.05094	1.04526	1.03826	
December 22 2016	241.63190	1.04683	1.05098	1.04530	1.03830	
December 23 2016	241.64161	1.04687	1.05102	1.04534	1.03835	
December 24 2016	241.65132	1.04692	1.05106	1.04538	1.03839	
December 25 2016	241.66103	1.04696	1.05111	1.04543	1.03843	
December 26 2016	241.67074	1.04700	1.05115	1.04547	1.03847	
December 27 2016	241.68045	1.04704	1.05119	1.04551	1.03851	
December 28 2016	241.69016	1.04708	1.05123	1.04555	1.03855	
December 29 2016	241.69987	1.04713	1.05128	1.04559	1.03860	
December 30 2016	241.70958	1.04717	1.05132	1.04564	1.03864	
December 31 2016	241.71929	1.04721	1.05136	1.04568	1.03868	
<b>CPI-U (NSA) for:</b>	<b>August 2016</b>	<b>240.853</b>	<b>September 2016</b>	<b>241.428</b>	<b>October 2016</b>	<b>241.729</b>

**TREASURY INFLATION-PROTECTED SECURITIES (TIPS)**  
**Ref CPI and Index Ratios for**  
**December 2016**

Security: Description: CUSIP Number: Dated Date: Original Issue Date: Additional Issue Date(s):			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	0-1/8% 10-Year TIPS Series D-2024 912828WU0 July 15, 2014 July 31, 2014 September 30, 2014 November 28, 2014
Maturity Date: Ref CPI on Dated Date:			January 15, 2024 233.33058	February 15, 2044 233.05900	April 15, 2019 234.31967	July 15, 2024 237.44594
Date	Ref CPI	Index Ratio	Index Ratio	Index Ratio	Index Ratio	
December 1 2016	241.42800	1.03470	1.03591	1.03034	1.01677	
December 2 2016	241.43771	1.03475	1.03595	1.03038	1.01681	
December 3 2016	241.44742	1.03479	1.03599	1.03042	1.01685	
December 4 2016	241.45713	1.03483	1.03603	1.03046	1.01689	
December 5 2016	241.46684	1.03487	1.03608	1.03050	1.01693	
December 6 2016	241.47655	1.03491	1.03612	1.03054	1.01697	
December 7 2016	241.48626	1.03495	1.03616	1.03058	1.01702	
December 8 2016	241.49597	1.03499	1.03620	1.03063	1.01706	
December 9 2016	241.50568	1.03504	1.03624	1.03067	1.01710	
December 10 2016	241.51539	1.03508	1.03628	1.03071	1.01714	
December 11 2016	241.52510	1.03512	1.03633	1.03075	1.01718	
December 12 2016	241.53481	1.03516	1.03637	1.03079	1.01722	
December 13 2016	241.54452	1.03520	1.03641	1.03083	1.01726	
December 14 2016	241.55423	1.03524	1.03645	1.03087	1.01730	
December 15 2016	241.56394	1.03529	1.03649	1.03092	1.01734	
December 16 2016	241.57365	1.03533	1.03653	1.03096	1.01738	
December 17 2016	241.58335	1.03537	1.03658	1.03100	1.01742	
December 18 2016	241.59306	1.03541	1.03662	1.03104	1.01747	
December 19 2016	241.60277	1.03545	1.03666	1.03108	1.01751	
December 20 2016	241.61248	1.03549	1.03670	1.03112	1.01755	
December 21 2016	241.62219	1.03554	1.03674	1.03116	1.01759	
December 22 2016	241.63190	1.03558	1.03678	1.03121	1.01763	
December 23 2016	241.64161	1.03562	1.03683	1.03125	1.01767	
December 24 2016	241.65132	1.03566	1.03687	1.03129	1.01771	
December 25 2016	241.66103	1.03570	1.03691	1.03133	1.01775	
December 26 2016	241.67074	1.03574	1.03695	1.03137	1.01779	
December 27 2016	241.68045	1.03579	1.03699	1.03141	1.01783	
December 28 2016	241.69016	1.03583	1.03703	1.03145	1.01787	
December 29 2016	241.69987	1.03587	1.03708	1.03150	1.01792	
December 30 2016	241.70958	1.03591	1.03712	1.03154	1.01796	
December 31 2016	241.71929	1.03595	1.03716	1.03158	1.01800	
<b>CPI-U (NSA) for:</b>	<b>August 2016</b>	<b>240.853</b>	<b>September 2016</b>	<b>241.428</b>	<b>October 2016</b>	<b>241.729</b>



**TREASURY INFLATION-PROTECTED SECURITIES (TIPS)**  
**Ref CPI and Index Ratios for**  
**December 2016**

Security: Description: CUSIP Number: Dated Date: Original Issue Date: Additional Issue Date(s):			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	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:			January 15, 2025 236.85403	February 15, 2045 235.48150	April 15, 2020 234.18067	July 15, 2025 237.14365
Date	Ref CPI	Index Ratio	Index Ratio	Index Ratio	Index Ratio	
December 1 2016	241.42800	1.01931	1.02525	1.03095	1.01807	
December 2 2016	241.43771	1.01935	1.02529	1.03099	1.01811	
December 3 2016	241.44742	1.01939	1.02533	1.03103	1.01815	
December 4 2016	241.45713	1.01943	1.02538	1.03107	1.01819	
December 5 2016	241.46684	1.01948	1.02542	1.03111	1.01823	
December 6 2016	241.47655	1.01952	1.02546	1.03115	1.01827	
December 7 2016	241.48626	1.01956	1.02550	1.03120	1.01831	
December 8 2016	241.49597	1.01960	1.02554	1.03124	1.01835	
December 9 2016	241.50568	1.01964	1.02558	1.03128	1.01839	
December 10 2016	241.51539	1.01968	1.02562	1.03132	1.01843	
December 11 2016	241.52510	1.01972	1.02566	1.03136	1.01848	
December 12 2016	241.53481	1.01976	1.02571	1.03140	1.01852	
December 13 2016	241.54452	1.01980	1.02575	1.03145	1.01856	
December 14 2016	241.55423	1.01984	1.02579	1.03149	1.01860	
December 15 2016	241.56394	1.01989	1.02583	1.03153	1.01864	
December 16 2016	241.57365	1.01993	1.02587	1.03157	1.01868	
December 17 2016	241.58335	1.01997	1.02591	1.03161	1.01872	
December 18 2016	241.59306	1.02001	1.02595	1.03165	1.01876	
December 19 2016	241.60277	1.02005	1.02599	1.03169	1.01880	
December 20 2016	241.61248	1.02009	1.02604	1.03174	1.01884	
December 21 2016	241.62219	1.02013	1.02608	1.03178	1.01889	
December 22 2016	241.63190	1.02017	1.02612	1.03182	1.01893	
December 23 2016	241.64161	1.02021	1.02616	1.03186	1.01897	
December 24 2016	241.65132	1.02025	1.02620	1.03190	1.01901	
December 25 2016	241.66103	1.02030	1.02624	1.03194	1.01905	
December 26 2016	241.67074	1.02034	1.02628	1.03198	1.01909	
December 27 2016	241.68045	1.02038	1.02632	1.03203	1.01913	
December 28 2016	241.69016	1.02042	1.02637	1.03207	1.01917	
December 29 2016	241.69987	1.02046	1.02641	1.03211	1.01921	
December 30 2016	241.70958	1.02050	1.02645	1.03215	1.01925	
December 31 2016	241.71929	1.02054	1.02649	1.03219	1.01929	
<b>CPI-U (NSA) for:</b>	<b>August 2016</b>	<b>240.853</b>	<b>September 2016</b>	<b>241.428</b>	<b>October 2016</b>	<b>241.729</b>

**TREASURY INFLATION-PROTECTED SECURITIES (TIPS)**  
**Ref CPI and Index Ratios for**  
**December 2016**

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	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	
December 1 2016	241.42800	1.01606	1.01892	1.01865	1.00720	
December 2 2016	241.43771	1.01610	1.01896	1.01869	1.00724	
December 3 2016	241.44742	1.01614	1.01900	1.01874	1.00728	
December 4 2016	241.45713	1.01619	1.01905	1.01878	1.00732	
December 5 2016	241.46684	1.01623	1.01909	1.01882	1.00737	
December 6 2016	241.47655	1.01627	1.01913	1.01886	1.00741	
December 7 2016	241.48626	1.01631	1.01917	1.01890	1.00745	
December 8 2016	241.49597	1.01635	1.01921	1.01894	1.00749	
December 9 2016	241.50568	1.01639	1.01925	1.01898	1.00753	
December 10 2016	241.51539	1.01643	1.01929	1.01902	1.00757	
December 11 2016	241.52510	1.01647	1.01933	1.01906	1.00761	
December 12 2016	241.53481	1.01651	1.01937	1.01910	1.00765	
December 13 2016	241.54452	1.01655	1.01941	1.01915	1.00769	
December 14 2016	241.55423	1.01659	1.01945	1.01919	1.00773	
December 15 2016	241.56394	1.01663	1.01950	1.01923	1.00777	
December 16 2016	241.57365	1.01668	1.01954	1.01927	1.00781	
December 17 2016	241.58335	1.01672	1.01958	1.01931	1.00785	
December 18 2016	241.59306	1.01676	1.01962	1.01935	1.00789	
December 19 2016	241.60277	1.01680	1.01966	1.01939	1.00793	
December 20 2016	241.61248	1.01684	1.01970	1.01943	1.00797	
December 21 2016	241.62219	1.01688	1.01974	1.01947	1.00801	
December 22 2016	241.63190	1.01692	1.01978	1.01951	1.00805	
December 23 2016	241.64161	1.01696	1.01982	1.01955	1.00809	
December 24 2016	241.65132	1.01700	1.01986	1.01960	1.00814	
December 25 2016	241.66103	1.01704	1.01991	1.01964	1.00818	
December 26 2016	241.67074	1.01708	1.01995	1.01968	1.00822	
December 27 2016	241.68045	1.01713	1.01999	1.01972	1.00826	
December 28 2016	241.69016	1.01717	1.02003	1.01976	1.00830	
December 29 2016	241.69987	1.01721	1.02007	1.01980	1.00834	
December 30 2016	241.70958	1.01725	1.02011	1.01984	1.00838	
December 31 2016	241.71929	1.01729	1.02015	1.01988	1.00842	
<b>CPI-U (NSA) for:</b>	<b>August 2016</b>	<b>240.853</b>	<b>September 2016</b>	<b>241.428</b>	<b>October 2016</b>	<b>241.729</b>