

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)
Ref CPI and Index Ratios for
September 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	
September 1 2018	251.98900	1.55799	1.53284	1.41966	1.33683	
September 2 2018	251.98957	1.55799	1.53285	1.41966	1.33684	
September 3 2018	251.99013	1.55800	1.53285	1.41966	1.33684	
September 4 2018	251.99070	1.55800	1.53285	1.41967	1.33684	
September 5 2018	251.99127	1.55800	1.53286	1.41967	1.33685	
September 6 2018	251.99183	1.55801	1.53286	1.41967	1.33685	
September 7 2018	251.99240	1.55801	1.53286	1.41968	1.33685	
September 8 2018	251.99297	1.55801	1.53287	1.41968	1.33686	
September 9 2018	251.99353	1.55802	1.53287	1.41968	1.33686	
September 10 2018	251.99410	1.55802	1.53287	1.41969	1.33686	
September 11 2018	251.99467	1.55802	1.53288	1.41969	1.33686	
September 12 2018	251.99523	1.55803	1.53288	1.41969	1.33687	
September 13 2018	251.99580	1.55803	1.53288	1.41969	1.33687	
September 14 2018	251.99637	1.55803	1.53289	1.41970	1.33687	
September 15 2018	251.99693	1.55804	1.53289	1.41970	1.33688	
September 16 2018	251.99750	1.55804	1.53289	1.41970	1.33688	
September 17 2018	251.99807	1.55804	1.53290	1.41971	1.33688	
September 18 2018	251.99863	1.55805	1.53290	1.41971	1.33689	
September 19 2018	251.99920	1.55805	1.53290	1.41971	1.33689	
September 20 2018	251.99977	1.55805	1.53291	1.41972	1.33689	
September 21 2018	252.00033	1.55806	1.53291	1.41972	1.33689	
September 22 2018	252.00090	1.55806	1.53291	1.41972	1.33690	
September 23 2018	252.00147	1.55807	1.53292	1.41973	1.33690	
September 24 2018	252.00203	1.55807	1.53292	1.41973	1.33690	
September 25 2018	252.00260	1.55807	1.53292	1.41973	1.33691	
September 26 2018	252.00317	1.55808	1.53293	1.41974	1.33691	
September 27 2018	252.00373	1.55808	1.53293	1.41974	1.33691	
September 28 2018	252.00430	1.55808	1.53294	1.41974	1.33692	
September 29 2018	252.00487	1.55809	1.53294	1.41975	1.33692	
September 30 2018	252.00543	1.55809	1.53294	1.41975	1.33692	
CPI-U (NSA) for:			May 2018 251.588	June 2018 251.989	July 2018 252.006	

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)
Ref CPI and Index Ratios for
September 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	
September 1 2018	251.98900	1.26961	1.24955	1.20283	1.17368	
September 2 2018	251.98957	1.26961	1.24955	1.20283	1.17368	
September 3 2018	251.99013	1.26962	1.24955	1.20284	1.17369	
September 4 2018	251.99070	1.26962	1.24955	1.20284	1.17369	
September 5 2018	251.99127	1.26962	1.24956	1.20284	1.17369	
September 6 2018	251.99183	1.26962	1.24956	1.20285	1.17369	
September 7 2018	251.99240	1.26963	1.24956	1.20285	1.17370	
September 8 2018	251.99297	1.26963	1.24957	1.20285	1.17370	
September 9 2018	251.99353	1.26963	1.24957	1.20285	1.17370	
September 10 2018	251.99410	1.26964	1.24957	1.20286	1.17370	
September 11 2018	251.99467	1.26964	1.24957	1.20286	1.17371	
September 12 2018	251.99523	1.26964	1.24958	1.20286	1.17371	
September 13 2018	251.99580	1.26964	1.24958	1.20286	1.17371	
September 14 2018	251.99637	1.26965	1.24958	1.20287	1.17372	
September 15 2018	251.99693	1.26965	1.24958	1.20287	1.17372	
September 16 2018	251.99750	1.26965	1.24959	1.20287	1.17372	
September 17 2018	251.99807	1.26966	1.24959	1.20288	1.17372	
September 18 2018	251.99863	1.26966	1.24959	1.20288	1.17373	
September 19 2018	251.99920	1.26966	1.24960	1.20288	1.17373	
September 20 2018	251.99977	1.26966	1.24960	1.20288	1.17373	
September 21 2018	252.00033	1.26967	1.24960	1.20289	1.17373	
September 22 2018	252.00090	1.26967	1.24960	1.20289	1.17374	
September 23 2018	252.00147	1.26967	1.24961	1.20289	1.17374	
September 24 2018	252.00203	1.26968	1.24961	1.20289	1.17374	
September 25 2018	252.00260	1.26968	1.24961	1.20290	1.17374	
September 26 2018	252.00317	1.26968	1.24962	1.20290	1.17375	
September 27 2018	252.00373	1.26968	1.24962	1.20290	1.17375	
September 28 2018	252.00430	1.26969	1.24962	1.20290	1.17375	
September 29 2018	252.00487	1.26969	1.24962	1.20291	1.17376	
September 30 2018	252.00543	1.26969	1.24963	1.20291	1.17376	
CPI-U (NSA) for:	May 2018	251.588	June 2018	251.989	July 2018	252.006

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)
Ref CPI and Index Ratios for
September 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	
September 1 2018	251.98900	1.17368	1.18018	1.16529	1.16586	
September 2 2018	251.98957	1.17368	1.18018	1.16529	1.16587	
September 3 2018	251.99013	1.17369	1.18018	1.16529	1.16587	
September 4 2018	251.99070	1.17369	1.18018	1.16530	1.16587	
September 5 2018	251.99127	1.17369	1.18019	1.16530	1.16587	
September 6 2018	251.99183	1.17369	1.18019	1.16530	1.16588	
September 7 2018	251.99240	1.17370	1.18019	1.16530	1.16588	
September 8 2018	251.99297	1.17370	1.18019	1.16531	1.16588	
September 9 2018	251.99353	1.17370	1.18020	1.16531	1.16588	
September 10 2018	251.99410	1.17370	1.18020	1.16531	1.16589	
September 11 2018	251.99467	1.17371	1.18020	1.16531	1.16589	
September 12 2018	251.99523	1.17371	1.18020	1.16532	1.16589	
September 13 2018	251.99580	1.17371	1.18021	1.16532	1.16589	
September 14 2018	251.99637	1.17372	1.18021	1.16532	1.16590	
September 15 2018	251.99693	1.17372	1.18021	1.16532	1.16590	
September 16 2018	251.99750	1.17372	1.18022	1.16533	1.16590	
September 17 2018	251.99807	1.17372	1.18022	1.16533	1.16590	
September 18 2018	251.99863	1.17373	1.18022	1.16533	1.16591	
September 19 2018	251.99920	1.17373	1.18022	1.16534	1.16591	
September 20 2018	251.99977	1.17373	1.18023	1.16534	1.16591	
September 21 2018	252.00033	1.17373	1.18023	1.16534	1.16592	
September 22 2018	252.00090	1.17374	1.18023	1.16534	1.16592	
September 23 2018	252.00147	1.17374	1.18023	1.16535	1.16592	
September 24 2018	252.00203	1.17374	1.18024	1.16535	1.16592	
September 25 2018	252.00260	1.17374	1.18024	1.16535	1.16593	
September 26 2018	252.00317	1.17375	1.18024	1.16535	1.16593	
September 27 2018	252.00373	1.17375	1.18024	1.16536	1.16593	
September 28 2018	252.00430	1.17375	1.18025	1.16536	1.16593	
September 29 2018	252.00487	1.17376	1.18025	1.16536	1.16594	
September 30 2018	252.00543	1.17376	1.18025	1.16536	1.16594	
CPI-U (NSA) for:	May 2018	251.588	June 2018	251.989	July 2018	252.006

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)
Ref CPI and Index Ratios for
September 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	
September 1 2018	251.98900	1.15546	1.15194	1.15068	1.11804	
September 2 2018	251.98957	1.15546	1.15194	1.15068	1.11805	
September 3 2018	251.99013	1.15547	1.15194	1.15069	1.11805	
September 4 2018	251.99070	1.15547	1.15194	1.15069	1.11805	
September 5 2018	251.99127	1.15547	1.15195	1.15069	1.11805	
September 6 2018	251.99183	1.15547	1.15195	1.15069	1.11806	
September 7 2018	251.99240	1.15548	1.15195	1.15070	1.11806	
September 8 2018	251.99297	1.15548	1.15195	1.15070	1.11806	
September 9 2018	251.99353	1.15548	1.15196	1.15070	1.11806	
September 10 2018	251.99410	1.15548	1.15196	1.15071	1.11807	
September 11 2018	251.99467	1.15549	1.15196	1.15071	1.11807	
September 12 2018	251.99523	1.15549	1.15196	1.15071	1.11807	
September 13 2018	251.99580	1.15549	1.15197	1.15071	1.11807	
September 14 2018	251.99637	1.15549	1.15197	1.15072	1.11808	
September 15 2018	251.99693	1.15550	1.15197	1.15072	1.11808	
September 16 2018	251.99750	1.15550	1.15198	1.15072	1.11808	
September 17 2018	251.99807	1.15550	1.15198	1.15072	1.11808	
September 18 2018	251.99863	1.15550	1.15198	1.15073	1.11809	
September 19 2018	251.99920	1.15551	1.15198	1.15073	1.11809	
September 20 2018	251.99977	1.15551	1.15199	1.15073	1.11809	
September 21 2018	252.00033	1.15551	1.15199	1.15073	1.11809	
September 22 2018	252.00090	1.15552	1.15199	1.15074	1.11810	
September 23 2018	252.00147	1.15552	1.15199	1.15074	1.11810	
September 24 2018	252.00203	1.15552	1.15200	1.15074	1.11810	
September 25 2018	252.00260	1.15552	1.15200	1.15074	1.11810	
September 26 2018	252.00317	1.15553	1.15200	1.15075	1.11811	
September 27 2018	252.00373	1.15553	1.15200	1.15075	1.11811	
September 28 2018	252.00430	1.15553	1.15201	1.15075	1.11811	
September 29 2018	252.00487	1.15553	1.15201	1.15075	1.11811	
September 30 2018	252.00543	1.15554	1.15201	1.15076	1.11812	
CPI-U (NSA) for:	May 2018	251.588	June 2018	251.989	July 2018	252.006

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

Date			Ref CPI	Index Ratio	Index Ratio	Index Ratio	Index Ratio	
September	1	2018	251.98900	1.11335	1.11519	1.09578	1.09170	
September	2	2018	251.98957	1.11335	1.11519	1.09578	1.09171	
September	3	2018	251.99013	1.11335	1.11519	1.09579	1.09171	
September	4	2018	251.99070	1.11335	1.11520	1.09579	1.09171	
September	5	2018	251.99127	1.11336	1.11520	1.09579	1.09171	
September	6	2018	251.99183	1.11336	1.11520	1.09579	1.09171	
September	7	2018	251.99240	1.11336	1.11520	1.09580	1.09172	
September	8	2018	251.99297	1.11336	1.11521	1.09580	1.09172	
September	9	2018	251.99353	1.11337	1.11521	1.09580	1.09172	
September	10	2018	251.99410	1.11337	1.11521	1.09580	1.09172	
September	11	2018	251.99467	1.11337	1.11521	1.09580	1.09173	
September	12	2018	251.99523	1.11337	1.11522	1.09581	1.09173	
September	13	2018	251.99580	1.11338	1.11522	1.09581	1.09173	
September	14	2018	251.99637	1.11338	1.11522	1.09581	1.09173	
September	15	2018	251.99693	1.11338	1.11522	1.09581	1.09174	
September	16	2018	251.99750	1.11338	1.11523	1.09582	1.09174	
September	17	2018	251.99807	1.11339	1.11523	1.09582	1.09174	
September	18	2018	251.99863	1.11339	1.11523	1.09582	1.09174	
September	19	2018	251.99920	1.11339	1.11524	1.09582	1.09175	
September	20	2018	251.99977	1.11339	1.11524	1.09583	1.09175	
September	21	2018	252.00033	1.11340	1.11524	1.09583	1.09175	
September	22	2018	252.00090	1.11340	1.11524	1.09583	1.09175	
September	23	2018	252.00147	1.11340	1.11525	1.09583	1.09176	
September	24	2018	252.00203	1.11340	1.11525	1.09584	1.09176	
September	25	2018	252.00260	1.11341	1.11525	1.09584	1.09176	
September	26	2018	252.00317	1.11341	1.11525	1.09584	1.09176	
September	27	2018	252.00373	1.11341	1.11526	1.09584	1.09177	
September	28	2018	252.00430	1.11341	1.11526	1.09585	1.09177	
September	29	2018	252.00487	1.11342	1.11526	1.09585	1.09177	
September	30	2018	252.00543	1.11342	1.11526	1.09585	1.09177	
CPI-U (NSA) for:			May 2018	251.588	June 2018	251.989	July 2018	252.006

Security:	0-1/8% 10-Year TIPS	0-3/4% 30-Year TIPS	0-1/8% 10-Year TIPS	0-1/8% 10-Year TIPS
Description:	Series A-2022	TIPS of February 2042	Series D-2022	Series A-2023
CUSIP Number:	912828SA9	912810QV3	912828TE0	912828UH1
Dated Date:	January 15, 2012	February 15, 2012	July 15, 2012	January 15, 2013
Original Issue Date:	January 31, 2012	February 29, 2012	July 31, 2012	January 31, 2013
Additional Issue Date(s):	March 30, 2012 May 31, 2012	June 29, 2012 October 31, 2012	September 28, 2012 November 30, 2012	March 28, 2013 May 31, 2013
Maturity Date:	January 15, 2022	February 15, 2042	July 15, 2022	January 15, 2023
Ref CPI on Dated Date:	226.33474	225.96062	229.96306	230.82203

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)
Ref CPI and Index Ratios for
September 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	
September 1 2018	251.98900	1.09603	1.08281	1.07997	1.08122	
September 2 2018	251.98957	1.09603	1.08281	1.07997	1.08123	
September 3 2018	251.99013	1.09603	1.08281	1.07997	1.08123	
September 4 2018	251.99070	1.09604	1.08282	1.07997	1.08123	
September 5 2018	251.99127	1.09604	1.08282	1.07998	1.08123	
September 6 2018	251.99183	1.09604	1.08282	1.07998	1.08124	
September 7 2018	251.99240	1.09604	1.08282	1.07998	1.08124	
September 8 2018	251.99297	1.09605	1.08283	1.07998	1.08124	
September 9 2018	251.99353	1.09605	1.08283	1.07999	1.08124	
September 10 2018	251.99410	1.09605	1.08283	1.07999	1.08125	
September 11 2018	251.99467	1.09605	1.08283	1.07999	1.08125	
September 12 2018	251.99523	1.09606	1.08284	1.07999	1.08125	
September 13 2018	251.99580	1.09606	1.08284	1.07999	1.08125	
September 14 2018	251.99637	1.09606	1.08284	1.08000	1.08126	
September 15 2018	251.99693	1.09606	1.08284	1.08000	1.08126	
September 16 2018	251.99750	1.09607	1.08285	1.08000	1.08126	
September 17 2018	251.99807	1.09607	1.08285	1.08000	1.08126	
September 18 2018	251.99863	1.09607	1.08285	1.08001	1.08127	
September 19 2018	251.99920	1.09607	1.08285	1.08001	1.08127	
September 20 2018	251.99977	1.09608	1.08285	1.08001	1.08127	
September 21 2018	252.00033	1.09608	1.08286	1.08001	1.08127	
September 22 2018	252.00090	1.09608	1.08286	1.08002	1.08128	
September 23 2018	252.00147	1.09608	1.08286	1.08002	1.08128	
September 24 2018	252.00203	1.09609	1.08286	1.08002	1.08128	
September 25 2018	252.00260	1.09609	1.08287	1.08002	1.08128	
September 26 2018	252.00317	1.09609	1.08287	1.08003	1.08128	
September 27 2018	252.00373	1.09609	1.08287	1.08003	1.08129	
September 28 2018	252.00430	1.09610	1.08287	1.08003	1.08129	
September 29 2018	252.00487	1.09610	1.08288	1.08003	1.08129	
September 30 2018	252.00543	1.09610	1.08288	1.08004	1.08129	
CPI-U (NSA) for:	May 2018	251.588	June 2018	251.989	July 2018	252.006

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)
Ref CPI and Index Ratios for
September 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	
September 1 2018	251.98900	1.07541	1.06125	1.06390	1.07010	
September 2 2018	251.98957	1.07541	1.06125	1.06390	1.07010	
September 3 2018	251.99013	1.07541	1.06125	1.06390	1.07011	
September 4 2018	251.99070	1.07541	1.06126	1.06391	1.07011	
September 5 2018	251.99127	1.07542	1.06126	1.06391	1.07011	
September 6 2018	251.99183	1.07542	1.06126	1.06391	1.07011	
September 7 2018	251.99240	1.07542	1.06126	1.06391	1.07012	
September 8 2018	251.99297	1.07542	1.06126	1.06392	1.07012	
September 9 2018	251.99353	1.07543	1.06127	1.06392	1.07012	
September 10 2018	251.99410	1.07543	1.06127	1.06392	1.07012	
September 11 2018	251.99467	1.07543	1.06127	1.06392	1.07013	
September 12 2018	251.99523	1.07543	1.06127	1.06393	1.07013	
September 13 2018	251.99580	1.07544	1.06128	1.06393	1.07013	
September 14 2018	251.99637	1.07544	1.06128	1.06393	1.07013	
September 15 2018	251.99693	1.07544	1.06128	1.06393	1.07013	
September 16 2018	251.99750	1.07544	1.06128	1.06394	1.07014	
September 17 2018	251.99807	1.07545	1.06129	1.06394	1.07014	
September 18 2018	251.99863	1.07545	1.06129	1.06394	1.07014	
September 19 2018	251.99920	1.07545	1.06129	1.06394	1.07014	
September 20 2018	251.99977	1.07545	1.06129	1.06395	1.07015	
September 21 2018	252.00033	1.07546	1.06130	1.06395	1.07015	
September 22 2018	252.00090	1.07546	1.06130	1.06395	1.07015	
September 23 2018	252.00147	1.07546	1.06130	1.06395	1.07015	
September 24 2018	252.00203	1.07546	1.06130	1.06396	1.07016	
September 25 2018	252.00260	1.07546	1.06131	1.06396	1.07016	
September 26 2018	252.00317	1.07547	1.06131	1.06396	1.07016	
September 27 2018	252.00373	1.07547	1.06131	1.06396	1.07016	
September 28 2018	252.00430	1.07547	1.06131	1.06396	1.07017	
September 29 2018	252.00487	1.07547	1.06131	1.06397	1.07017	
September 30 2018	252.00543	1.07548	1.06132	1.06397	1.07017	
CPI-U (NSA) for:	May 2018	251.588	June 2018	251.989	July 2018	252.006

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)
Ref CPI and Index Ratios for
September 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	
September 1 2018	251.98900	1.07605	1.06260	1.06051	1.06349	
September 2 2018	251.98957	1.07605	1.06260	1.06051	1.06350	
September 3 2018	251.99013	1.07605	1.06261	1.06051	1.06350	
September 4 2018	251.99070	1.07605	1.06261	1.06052	1.06350	
September 5 2018	251.99127	1.07605	1.06261	1.06052	1.06350	
September 6 2018	251.99183	1.07606	1.06261	1.06052	1.06351	
September 7 2018	251.99240	1.07606	1.06262	1.06052	1.06351	
September 8 2018	251.99297	1.07606	1.06262	1.06053	1.06351	
September 9 2018	251.99353	1.07606	1.06262	1.06053	1.06351	
September 10 2018	251.99410	1.07607	1.06262	1.06053	1.06352	
September 11 2018	251.99467	1.07607	1.06262	1.06053	1.06352	
September 12 2018	251.99523	1.07607	1.06263	1.06054	1.06352	
September 13 2018	251.99580	1.07607	1.06263	1.06054	1.06352	
September 14 2018	251.99637	1.07608	1.06263	1.06054	1.06352	
September 15 2018	251.99693	1.07608	1.06263	1.06054	1.06353	
September 16 2018	251.99750	1.07608	1.06264	1.06055	1.06353	
September 17 2018	251.99807	1.07608	1.06264	1.06055	1.06353	
September 18 2018	251.99863	1.07609	1.06264	1.06055	1.06353	
September 19 2018	251.99920	1.07609	1.06264	1.06055	1.06354	
September 20 2018	251.99977	1.07609	1.06265	1.06055	1.06354	
September 21 2018	252.00033	1.07609	1.06265	1.06056	1.06354	
September 22 2018	252.00090	1.07610	1.06265	1.06056	1.06354	
September 23 2018	252.00147	1.07610	1.06265	1.06056	1.06355	
September 24 2018	252.00203	1.07610	1.06266	1.06056	1.06355	
September 25 2018	252.00260	1.07610	1.06266	1.06057	1.06355	
September 26 2018	252.00317	1.07611	1.06266	1.06057	1.06355	
September 27 2018	252.00373	1.07611	1.06266	1.06057	1.06356	
September 28 2018	252.00430	1.07611	1.06267	1.06057	1.06356	
September 29 2018	252.00487	1.07611	1.06267	1.06058	1.06356	
September 30 2018	252.00543	1.07612	1.06267	1.06058	1.06356	
CPI-U (NSA) for:	May 2018	251.588	June 2018	251.989	July 2018	252.006

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

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	
September 1 2018	251.98900	1.06321	1.05126	1.04318	1.04390	
September 2 2018	251.98957	1.06322	1.05126	1.04318	1.04390	
September 3 2018	251.99013	1.06322	1.05127	1.04318	1.04390	
September 4 2018	251.99070	1.06322	1.05127	1.04318	1.04390	
September 5 2018	251.99127	1.06322	1.05127	1.04319	1.04391	
September 6 2018	251.99183	1.06323	1.05127	1.04319	1.04391	
September 7 2018	251.99240	1.06323	1.05128	1.04319	1.04391	
September 8 2018	251.99297	1.06323	1.05128	1.04319	1.04391	
September 9 2018	251.99353	1.06323	1.05128	1.04320	1.04392	
September 10 2018	251.99410	1.06323	1.05128	1.04320	1.04392	
September 11 2018	251.99467	1.06324	1.05129	1.04320	1.04392	
September 12 2018	251.99523	1.06324	1.05129	1.04320	1.04392	
September 13 2018	251.99580	1.06324	1.05129	1.04321	1.04393	
September 14 2018	251.99637	1.06324	1.05129	1.04321	1.04393	
September 15 2018	251.99693	1.06325	1.05130	1.04321	1.04393	
September 16 2018	251.99750	1.06325	1.05130	1.04321	1.04393	
September 17 2018	251.99807	1.06325	1.05130	1.04321	1.04393	
September 18 2018	251.99863	1.06325	1.05130	1.04322	1.04394	
September 19 2018	251.99920	1.06326	1.05131	1.04322	1.04394	
September 20 2018	251.99977	1.06326	1.05131	1.04322	1.04394	
September 21 2018	252.00033	1.06326	1.05131	1.04322	1.04394	
September 22 2018	252.00090	1.06326	1.05131	1.04323	1.04395	
September 23 2018	252.00147	1.06327	1.05131	1.04323	1.04395	
September 24 2018	252.00203	1.06327	1.05132	1.04323	1.04395	
September 25 2018	252.00260	1.06327	1.05132	1.04323	1.04395	
September 26 2018	252.00317	1.06327	1.05132	1.04324	1.04396	
September 27 2018	252.00373	1.06328	1.05132	1.04324	1.04396	
September 28 2018	252.00430	1.06328	1.05133	1.04324	1.04396	
September 29 2018	252.00487	1.06328	1.05133	1.04324	1.04396	
September 30 2018	252.00543	1.06328	1.05133	1.04325	1.04397	
CPI-U (NSA) for:	May 2018	251.588	June 2018	251.989	July 2018	252.006

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)
Ref CPI and Index Ratios for
September 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 April 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	
September 1 2018	251.98900	1.03616	1.03013	1.02158	1.02187	
September 2 2018	251.98957	1.03616	1.03013	1.02158	1.02187	
September 3 2018	251.99013	1.03616	1.03014	1.02159	1.02187	
September 4 2018	251.99070	1.03617	1.03014	1.02159	1.02187	
September 5 2018	251.99127	1.03617	1.03014	1.02159	1.02188	
September 6 2018	251.99183	1.03617	1.03014	1.02159	1.02188	
September 7 2018	251.99240	1.03617	1.03014	1.02159	1.02188	
September 8 2018	251.99297	1.03617	1.03015	1.02160	1.02188	
September 9 2018	251.99353	1.03618	1.03015	1.02160	1.02189	
September 10 2018	251.99410	1.03618	1.03015	1.02160	1.02189	
September 11 2018	251.99467	1.03618	1.03015	1.02160	1.02189	
September 12 2018	251.99523	1.03618	1.03016	1.02161	1.02189	
September 13 2018	251.99580	1.03619	1.03016	1.02161	1.02190	
September 14 2018	251.99637	1.03619	1.03016	1.02161	1.02190	
September 15 2018	251.99693	1.03619	1.03016	1.02161	1.02190	
September 16 2018	251.99750	1.03619	1.03017	1.02162	1.02190	
September 17 2018	251.99807	1.03620	1.03017	1.02162	1.02190	
September 18 2018	251.99863	1.03620	1.03017	1.02162	1.02191	
September 19 2018	251.99920	1.03620	1.03017	1.02162	1.02191	
September 20 2018	251.99977	1.03620	1.03018	1.02162	1.02191	
September 21 2018	252.00033	1.03620	1.03018	1.02163	1.02191	
September 22 2018	252.00090	1.03621	1.03018	1.02163	1.02192	
September 23 2018	252.00147	1.03621	1.03018	1.02163	1.02192	
September 24 2018	252.00203	1.03621	1.03018	1.02163	1.02192	
September 25 2018	252.00260	1.03621	1.03019	1.02164	1.02192	
September 26 2018	252.00317	1.03622	1.03019	1.02164	1.02193	
September 27 2018	252.00373	1.03622	1.03019	1.02164	1.02193	
September 28 2018	252.00430	1.03622	1.03019	1.02164	1.02193	
September 29 2018	252.00487	1.03622	1.03020	1.02165	1.02193	
September 30 2018	252.00543	1.03623	1.03020	1.02165	1.02193	
CPI-U (NSA) for:	May 2018	251.588	June 2018	251.989	July 2018	252.006

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

Security: Description: CUSIP Number: Dated Date: Original Issue Date: Additional Issue Date(s):			0-5/8% 5-Year TIPS Series X-2023 9128284H0 April 15, 2018 April 30, 2018	0-3/4% 10-Year TIPS Series D-2028 912828Y38 July 15, 2018 July 31, 2018				
Maturity Date: Ref CPI on Dated Date:			April 15, 2023 248.39153	July 15, 2028 251.01658				
Date			Ref CPI	Index Ratio	Index Ratio			
September	1	2018	251.98900	1.01448	1.00387			
September	2	2018	251.98957	1.01449	1.00388			
September	3	2018	251.99013	1.01449	1.00388			
September	4	2018	251.99070	1.01449	1.00388			
September	5	2018	251.99127	1.01449	1.00388			
September	6	2018	251.99183	1.01449	1.00389			
September	7	2018	251.99240	1.01450	1.00389			
September	8	2018	251.99297	1.01450	1.00389			
September	9	2018	251.99353	1.01450	1.00389			
September	10	2018	251.99410	1.01450	1.00389			
September	11	2018	251.99467	1.01451	1.00390			
September	12	2018	251.99523	1.01451	1.00390			
September	13	2018	251.99580	1.01451	1.00390			
September	14	2018	251.99637	1.01451	1.00390			
September	15	2018	251.99693	1.01451	1.00391			
September	16	2018	251.99750	1.01452	1.00391			
September	17	2018	251.99807	1.01452	1.00391			
September	18	2018	251.99863	1.01452	1.00391			
September	19	2018	251.99920	1.01452	1.00391			
September	20	2018	251.99977	1.01453	1.00392			
September	21	2018	252.00033	1.01453	1.00392			
September	22	2018	252.00090	1.01453	1.00392			
September	23	2018	252.00147	1.01453	1.00392			
September	24	2018	252.00203	1.01454	1.00393			
September	25	2018	252.00260	1.01454	1.00393			
September	26	2018	252.00317	1.01454	1.00393			
September	27	2018	252.00373	1.01454	1.00393			
September	28	2018	252.00430	1.01454	1.00393			
September	29	2018	252.00487	1.01455	1.00394			
September	30	2018	252.00543	1.01455	1.00394			
CPI-U (NSA) for:			May 2018	251.588	June 2018	251.989	July 2018	252.006