

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)
Ref CPI and Index Ratios for
November 2024

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
November	1	2024	314.79600	1.94631	1.91490	1.67003
November	2	2024	314.81283	1.94641	1.91500	1.67012
November	3	2024	314.82967	1.94652	1.91510	1.67021
November	4	2024	314.84650	1.94662	1.91520	1.67030
November	5	2024	314.86333	1.94673	1.91530	1.67039
November	6	2024	314.88017	1.94683	1.91541	1.67048
November	7	2024	314.89700	1.94693	1.91551	1.67057
November	8	2024	314.91383	1.94704	1.91561	1.67066
November	9	2024	314.93067	1.94714	1.91571	1.67075
November	10	2024	314.94750	1.94725	1.91582	1.67084
November	11	2024	314.96433	1.94735	1.91592	1.67093
November	12	2024	314.98117	1.94745	1.91602	1.67102
November	13	2024	314.99800	1.94756	1.91612	1.67111
November	14	2024	315.01483	1.94766	1.91623	1.67119
November	15	2024	315.03167	1.94777	1.91633	1.67128
November	16	2024	315.04850	1.94787	1.91643	1.67137
November	17	2024	315.06533	1.94797	1.91653	1.67146
November	18	2024	315.08217	1.94808	1.91664	1.67155
November	19	2024	315.09900	1.94818	1.91674	1.67164
November	20	2024	315.11583	1.94829	1.91684	1.67173
November	21	2024	315.13267	1.94839	1.91694	1.67182
November	22	2024	315.14950	1.94849	1.91705	1.67191
November	23	2024	315.16633	1.94860	1.91715	1.67200
November	24	2024	315.18317	1.94870	1.91725	1.67209
November	25	2024	315.20000	1.94881	1.91735	1.67218
November	26	2024	315.21683	1.94891	1.91746	1.67227
November	27	2024	315.23367	1.94901	1.91756	1.67236
November	28	2024	315.25050	1.94912	1.91766	1.67245
November	29	2024	315.26733	1.94922	1.91776	1.67253
November	30	2024	315.28417	1.94933	1.91786	1.67262
CPI-U (NSA) for:			July 2024	314.540	August 2024	314.796
					September 2024	315.301

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)

Ref CPI and Index Ratios for

November 2024

Security: Description: CUSIP Number: Dated Date: Original Issue Date: Additional Issue Date(s): Maturity Date: Ref CPI on Dated Date:				2% 20-Year TIPS TIPS of January 2026 912810FS2 January 15, 2006 January 31, 2006 July 31, 2006 January 15, 2026 198.47742	2-3/8% 20-Year TIPS TIPS of January 2027 912810PS1 January 15, 2007 January 31, 2007 July 31, 2007 January 15, 2027 201.66452	1-3/4% 20-Year TIPS TIPS of January 2028 912810PV4 January 15, 2008 January 31, 2008 July 31, 2008 January 15, 2028 209.49645	2-1/2% 20-Year TIPS TIPS of January 2029 912810PZ5 January 15, 2009 January 30, 2009 July 31, 2009 January 15, 2029 214.69971	
Date				Ref CPI	Index Ratio	Index Ratio	Index Ratio	Index Ratio
November	1	2024	314.79600	1.58605	1.56099	1.50263	1.46622	
November	2	2024	314.81283	1.58614	1.56107	1.50271	1.46629	
November	3	2024	314.82967	1.58622	1.56116	1.50279	1.46637	
November	4	2024	314.84650	1.58631	1.56124	1.50287	1.46645	
November	5	2024	314.86333	1.58639	1.56132	1.50295	1.46653	
November	6	2024	314.88017	1.58648	1.56141	1.50303	1.46661	
November	7	2024	314.89700	1.58656	1.56149	1.50311	1.46669	
November	8	2024	314.91383	1.58665	1.56157	1.50319	1.46676	
November	9	2024	314.93067	1.58673	1.56166	1.50327	1.46684	
November	10	2024	314.94750	1.58682	1.56174	1.50335	1.46692	
November	11	2024	314.96433	1.58690	1.56182	1.50344	1.46700	
November	12	2024	314.98117	1.58699	1.56191	1.50352	1.46708	
November	13	2024	314.99800	1.58707	1.56199	1.50360	1.46716	
November	14	2024	315.01483	1.58716	1.56207	1.50368	1.46723	
November	15	2024	315.03167	1.58724	1.56216	1.50376	1.46731	
November	16	2024	315.04850	1.58733	1.56224	1.50384	1.46739	
November	17	2024	315.06533	1.58741	1.56232	1.50392	1.46747	
November	18	2024	315.08217	1.58750	1.56241	1.50400	1.46755	
November	19	2024	315.09900	1.58758	1.56249	1.50408	1.46763	
November	20	2024	315.11583	1.58767	1.56257	1.50416	1.46770	
November	21	2024	315.13267	1.58775	1.56266	1.50424	1.46778	
November	22	2024	315.14950	1.58784	1.56274	1.50432	1.46786	
November	23	2024	315.16633	1.58792	1.56282	1.50440	1.46794	
November	24	2024	315.18317	1.58801	1.56291	1.50448	1.46802	
November	25	2024	315.20000	1.58809	1.56299	1.50456	1.46810	
November	26	2024	315.21683	1.58817	1.56308	1.50464	1.46818	
November	27	2024	315.23367	1.58826	1.56316	1.50472	1.46825	
November	28	2024	315.25050	1.58834	1.56324	1.50480	1.46833	
November	29	2024	315.26733	1.58843	1.56333	1.50488	1.46841	
November	30	2024	315.28417	1.58851	1.56341	1.50496	1.46849	
CPI-U (NSA) for:				July 2024 314.540	August 2024 314.796	September 2024 315.301		

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)

Ref CPI and Index Ratios for

November 2024

Security: Description: CUSIP Number: Dated Date: Original Issue Date: Additional Issue Date(s):				2-1/8% 30-Year TIPS TIPS of February 2040 912810QF8 February 15, 2010 February 26, 2010 August 31, 2010		2-1/8% 30-Year TIPS TIPS of February 2041 912810QP6 February 15, 2011 February 28, 2011 June 30, 2011 October 31, 2011		0-3/4% 30-Year TIPS TIPS of February 2042 912810QV3 February 15, 2012 February 29, 2012 June 29, 2012 October 31, 2012		0-5/8% 30-Year TIPS TIPS of February 2043 912810RA8 February 15, 2013 February 28, 2013 June 28, 2013 October 31, 2013	
Maturity Date: Ref CPI on Dated Date:				February 15, 2040 216.13950		February 15, 2041 218.99100		February 15, 2042 225.96062		February 15, 2043 229.91100	
Date				Ref CPI		Index Ratio		Index Ratio		Index Ratio	
November	1	2024	314.79600	1.45645	1.43748	1.39315	1.36921				
November	2	2024	314.81283	1.45653	1.43756	1.39322	1.36928				
November	3	2024	314.82967	1.45660	1.43764	1.39329	1.36935				
November	4	2024	314.84650	1.45668	1.43771	1.39337	1.36943				
November	5	2024	314.86333	1.45676	1.43779	1.39344	1.36950				
November	6	2024	314.88017	1.45684	1.43787	1.39352	1.36957				
November	7	2024	314.89700	1.45692	1.43794	1.39359	1.36965				
November	8	2024	314.91383	1.45699	1.43802	1.39367	1.36972				
November	9	2024	314.93067	1.45707	1.43810	1.39374	1.36979				
November	10	2024	314.94750	1.45715	1.43818	1.39382	1.36987				
November	11	2024	314.96433	1.45723	1.43825	1.39389	1.36994				
November	12	2024	314.98117	1.45730	1.43833	1.39396	1.37001				
November	13	2024	314.99800	1.45738	1.43841	1.39404	1.37009				
November	14	2024	315.01483	1.45746	1.43848	1.39411	1.37016				
November	15	2024	315.03167	1.45754	1.43856	1.39419	1.37023				
November	16	2024	315.04850	1.45762	1.43864	1.39426	1.37031				
November	17	2024	315.06533	1.45769	1.43871	1.39434	1.37038				
November	18	2024	315.08217	1.45777	1.43879	1.39441	1.37045				
November	19	2024	315.09900	1.45785	1.43887	1.39449	1.37053				
November	20	2024	315.11583	1.45793	1.43894	1.39456	1.37060				
November	21	2024	315.13267	1.45801	1.43902	1.39464	1.37067				
November	22	2024	315.14950	1.45808	1.43910	1.39471	1.37075				
November	23	2024	315.16633	1.45816	1.43917	1.39478	1.37082				
November	24	2024	315.18317	1.45824	1.43925	1.39486	1.37089				
November	25	2024	315.20000	1.45832	1.43933	1.39493	1.37097				
November	26	2024	315.21683	1.45840	1.43941	1.39501	1.37104				
November	27	2024	315.23367	1.45847	1.43948	1.39508	1.37111				
November	28	2024	315.25050	1.45855	1.43956	1.39516	1.37118				
November	29	2024	315.26733	1.45863	1.43964	1.39523	1.37126				
November	30	2024	315.28417	1.45871	1.43971	1.39531	1.37133				
CPI-U (NSA) for:				July 2024	314.540	August 2024	314.796	September 2024	315.301		

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)

Ref CPI and Index Ratios for

November 2024

Security: Description: CUSIP Number: Dated Date: Original Issue Date: Additional Issue Date(s):				1-3/8% 30-Year TIPS TIPS of February 2044 912810RF7 February 15, 2014 February 28, 2014 June 30, 2014 October 31, 2014	0-1/4% 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	0-3/8% 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:				February 15, 2044 233.05900	January 15, 2025 236.85403	February 15, 2045 235.48150	July 15, 2025 237.14365		
Date				Ref CPI	Index Ratio	Index Ratio	Index Ratio	Index Ratio	
November	1	2024	314.79600	1.35071	1.32907	1.33682	1.32745		
November	2	2024	314.81283	1.35079	1.32914	1.33689	1.32752		
November	3	2024	314.82967	1.35086	1.32921	1.33696	1.32759		
November	4	2024	314.84650	1.35093	1.32928	1.33703	1.32766		
November	5	2024	314.86333	1.35100	1.32936	1.33710	1.32773		
November	6	2024	314.88017	1.35107	1.32943	1.33718	1.32780		
November	7	2024	314.89700	1.35115	1.32950	1.33725	1.32787		
November	8	2024	314.91383	1.35122	1.32957	1.33732	1.32795		
November	9	2024	314.93067	1.35129	1.32964	1.33739	1.32802		
November	10	2024	314.94750	1.35136	1.32971	1.33746	1.32809		
November	11	2024	314.96433	1.35144	1.32978	1.33753	1.32816		
November	12	2024	314.98117	1.35151	1.32985	1.33760	1.32823		
November	13	2024	314.99800	1.35158	1.32992	1.33768	1.32830		
November	14	2024	315.01483	1.35165	1.33000	1.33775	1.32837		
November	15	2024	315.03167	1.35172	1.33007	1.33782	1.32844		
November	16	2024	315.04850	1.35180	1.33014	1.33789	1.32851		
November	17	2024	315.06533	1.35187	1.33021	1.33796	1.32858		
November	18	2024	315.08217	1.35194	1.33028	1.33803	1.32866		
November	19	2024	315.09900	1.35201	1.33035	1.33811	1.32873		
November	20	2024	315.11583	1.35209	1.33042	1.33818	1.32880		
November	21	2024	315.13267	1.35216	1.33049	1.33825	1.32887		
November	22	2024	315.14950	1.35223	1.33056	1.33832	1.32894		
November	23	2024	315.16633	1.35230	1.33064	1.33839	1.32901		
November	24	2024	315.18317	1.35238	1.33071	1.33846	1.32908		
November	25	2024	315.20000	1.35245	1.33078	1.33853	1.32915		
November	26	2024	315.21683	1.35252	1.33085	1.33861	1.32922		
November	27	2024	315.23367	1.35259	1.33092	1.33868	1.32929		
November	28	2024	315.25050	1.35266	1.33099	1.33875	1.32937		
November	29	2024	315.26733	1.35274	1.33106	1.33882	1.32944		
November	30	2024	315.28417	1.35281	1.33113	1.33889	1.32951		
CPI-U (NSA) for:				July 2024	314.540	August 2024	314.796	September 2024	315.301

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)

Ref CPI and Index Ratios for

November 2024

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% 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		
Maturity Date: Ref CPI on Dated Date:				January 15, 2026 237.61129	February 15, 2046 236.94448	July 15, 2026 239.70132	January 15, 2027 241.55919		
Date				Ref CPI	Index Ratio	Index Ratio	Index Ratio	Index Ratio	
November	1	2024	314.79600	1.32484	1.32856	1.31328	1.30318		
November	2	2024	314.81283	1.32491	1.32864	1.31335	1.30325		
November	3	2024	314.82967	1.32498	1.32871	1.31342	1.30332		
November	4	2024	314.84650	1.32505	1.32878	1.31350	1.30339		
November	5	2024	314.86333	1.32512	1.32885	1.31357	1.30346		
November	6	2024	314.88017	1.32519	1.32892	1.31364	1.30353		
November	7	2024	314.89700	1.32526	1.32899	1.31371	1.30360		
November	8	2024	314.91383	1.32533	1.32906	1.31378	1.30367		
November	9	2024	314.93067	1.32540	1.32913	1.31385	1.30374		
November	10	2024	314.94750	1.32547	1.32920	1.31392	1.30381		
November	11	2024	314.96433	1.32554	1.32927	1.31399	1.30388		
November	12	2024	314.98117	1.32562	1.32935	1.31406	1.30395		
November	13	2024	314.99800	1.32569	1.32942	1.31413	1.30402		
November	14	2024	315.01483	1.32576	1.32949	1.31420	1.30409		
November	15	2024	315.03167	1.32583	1.32956	1.31427	1.30416		
November	16	2024	315.04850	1.32590	1.32963	1.31434	1.30423		
November	17	2024	315.06533	1.32597	1.32970	1.31441	1.30430		
November	18	2024	315.08217	1.32604	1.32977	1.31448	1.30437		
November	19	2024	315.09900	1.32611	1.32984	1.31455	1.30444		
November	20	2024	315.11583	1.32618	1.32991	1.31462	1.30451		
November	21	2024	315.13267	1.32625	1.32999	1.31469	1.30458		
November	22	2024	315.14950	1.32632	1.33006	1.31476	1.30465		
November	23	2024	315.16633	1.32639	1.33013	1.31483	1.30472		
November	24	2024	315.18317	1.32647	1.33020	1.31490	1.30479		
November	25	2024	315.20000	1.32654	1.33027	1.31497	1.30486		
November	26	2024	315.21683	1.32661	1.33034	1.31504	1.30493		
November	27	2024	315.23367	1.32668	1.33041	1.31511	1.30500		
November	28	2024	315.25050	1.32675	1.33048	1.31518	1.30507		
November	29	2024	315.26733	1.32682	1.33055	1.31525	1.30513		
November	30	2024	315.28417	1.32689	1.33062	1.31532	1.30520		
CPI-U (NSA) for:				July 2024	314.540	August 2024	314.796	September 2024	315.301

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)

Ref CPI and Index Ratios for

November 2024

Security: Description: CUSIP Number: Dated Date: Original Issue Date: Additional Issue Date(s):				0-7/8% 30-Year TIPS TIPS of February 2047 912810RW0 February 15, 2017 February 28, 2017 June 30, 2017 October 31, 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 October 31, 2018	
Maturity Date: Ref CPI on Dated Date:				February 15, 2047 241.39250		July 15, 2027 244.61839		January 15, 2028 246.66571		February 15, 2048 246.59650	
Date				Ref CPI		Index Ratio		Index Ratio		Index Ratio	
November 1 2024				314.79600		1.30408		1.28689		1.27620	
November 2 2024				314.81283		1.30415		1.28695		1.27627	
November 3 2024				314.82967		1.30422		1.28702		1.27634	
November 4 2024				314.84650		1.30429		1.28709		1.27641	
November 5 2024				314.86333		1.30436		1.28716		1.27648	
November 6 2024				314.88017		1.30443		1.28723		1.27655	
November 7 2024				314.89700		1.30450		1.28730		1.27661	
November 8 2024				314.91383		1.30457		1.28737		1.27668	
November 9 2024				314.93067		1.30464		1.28744		1.27675	
November 10 2024				314.94750		1.30471		1.28751		1.27682	
November 11 2024				314.96433		1.30478		1.28757		1.27689	
November 12 2024				314.98117		1.30485		1.28764		1.27696	
November 13 2024				314.99800		1.30492		1.28771		1.27702	
November 14 2024				315.01483		1.30499		1.28778		1.27709	
November 15 2024				315.03167		1.30506		1.28785		1.27716	
November 16 2024				315.04850		1.30513		1.28792		1.27723	
November 17 2024				315.06533		1.30520		1.28799		1.27730	
November 18 2024				315.08217		1.30527		1.28806		1.27737	
November 19 2024				315.09900		1.30534		1.28812		1.27743	
November 20 2024				315.11583		1.30541		1.28819		1.27750	
November 21 2024				315.13267		1.30548		1.28826		1.27757	
November 22 2024				315.14950		1.30555		1.28833		1.27764	
November 23 2024				315.16633		1.30562		1.28840		1.27771	
November 24 2024				315.18317		1.30569		1.28847		1.27777	
November 25 2024				315.20000		1.30576		1.28854		1.27784	
November 26 2024				315.21683		1.30583		1.28861		1.27791	
November 27 2024				315.23367		1.30590		1.28868		1.27798	
November 28 2024				315.25050		1.30597		1.28874		1.27805	
November 29 2024				315.26733		1.30604		1.28881		1.27812	
November 30 2024				315.28417		1.30611		1.28888		1.27818	
CPI-U (NSA) for:				July 2024	314.540	August 2024	314.796	September 2024	315.301		

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)

Ref CPI and Index Ratios for

November 2024

Security: Description: CUSIP Number: Dated Date: Original Issue Date: Additional Issue Date(s):				0-3/4% 10-Year TIPS Series D-2028 912828Y38 July 15, 2018 July 31, 2018 September 28, 2018 November 30, 2018	0-7/8% 10-Year TIPS Series A-2029 9128285W6 January 15, 2019 January 31, 2019 March 29, 2019 May 31, 2019	1% 30-Year TIPS TIPS of February 2049 912810SG4 February 15, 2019 February 28, 2019 August 30, 2019	0-1/4% 10-Year TIPS Series D-2029 9128287D6 July 15, 2019 July 31, 2019 September 30, 2019 November 29, 2019		
Maturity Date: Ref CPI on Dated Date:				July 15, 2028 251.01658	January 15, 2029 252.50248	February 15, 2049 251.63550	July 15, 2029 255.79368		
Date				Ref CPI	Index Ratio	Index Ratio	Index Ratio	Index Ratio	
November	1	2024	314.79600	1.25408	1.24670	1.25100	1.23066		
November	2	2024	314.81283	1.25415	1.24677	1.25107	1.23073		
November	3	2024	314.82967	1.25422	1.24684	1.25113	1.23080		
November	4	2024	314.84650	1.25429	1.24690	1.25120	1.23086		
November	5	2024	314.86333	1.25435	1.24697	1.25127	1.23093		
November	6	2024	314.88017	1.25442	1.24704	1.25133	1.23099		
November	7	2024	314.89700	1.25449	1.24710	1.25140	1.23106		
November	8	2024	314.91383	1.25455	1.24717	1.25147	1.23112		
November	9	2024	314.93067	1.25462	1.24724	1.25154	1.23119		
November	10	2024	314.94750	1.25469	1.24730	1.25160	1.23126		
November	11	2024	314.96433	1.25476	1.24737	1.25167	1.23132		
November	12	2024	314.98117	1.25482	1.24744	1.25174	1.23139		
November	13	2024	314.99800	1.25489	1.24750	1.25180	1.23145		
November	14	2024	315.01483	1.25496	1.24757	1.25187	1.23152		
November	15	2024	315.03167	1.25502	1.24764	1.25194	1.23159		
November	16	2024	315.04850	1.25509	1.24770	1.25200	1.23165		
November	17	2024	315.06533	1.25516	1.24777	1.25207	1.23172		
November	18	2024	315.08217	1.25522	1.24784	1.25214	1.23178		
November	19	2024	315.09900	1.25529	1.24790	1.25220	1.23185		
November	20	2024	315.11583	1.25536	1.24797	1.25227	1.23191		
November	21	2024	315.13267	1.25543	1.24804	1.25234	1.23198		
November	22	2024	315.14950	1.25549	1.24810	1.25240	1.23205		
November	23	2024	315.16633	1.25556	1.24817	1.25247	1.23211		
November	24	2024	315.18317	1.25563	1.24824	1.25254	1.23218		
November	25	2024	315.20000	1.25569	1.24830	1.25261	1.23224		
November	26	2024	315.21683	1.25576	1.24837	1.25267	1.23231		
November	27	2024	315.23367	1.25583	1.24844	1.25274	1.23237		
November	28	2024	315.25050	1.25590	1.24850	1.25281	1.23244		
November	29	2024	315.26733	1.25596	1.24857	1.25287	1.23251		
November	30	2024	315.28417	1.25603	1.24864	1.25294	1.23257		
CPI-U (NSA) for:				July 2024	314.540	August 2024	314.796	September 2024	315.301

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)

Ref CPI and Index Ratios for

November 2024

Security: Description: CUSIP Number: Dated Date: Original Issue Date: Additional Issue Date(s):				0-1/8% 10-Year TIPS Series A-2030 912828Z37 January 15, 2020 January 31, 2020 March 31, 2020 May 29, 2020	0-1/4% 30-Year TIPS TIPS of February 2050 912810SM1 February 15, 2020 February 28, 2020 August 31, 2020	0-1/8% 5-Year TIPS Series X-2025 912828ZJ2 April 15, 2020 April 30, 2020 June 30, 2020 July 13, 2020	0-1/8% 10-Year TIPS Series D-2030 912828ZZ6 July 15, 2020 July 31, 2020 September 30, 2020 November 30, 2020		
Maturity Date: Ref CPI on Dated Date:				January 15, 2030 257.28368	February 15, 2050 257.09503	April 15, 2025 258.30093	July 15, 2030 256.39126		
Date				Ref CPI	Index Ratio	Index Ratio	Index Ratio	Index Ratio	
November	1	2024	314.79600	1.22354	1.22443	1.21872	1.22780		
November	2	2024	314.81283	1.22360	1.22450	1.21878	1.22786		
November	3	2024	314.82967	1.22367	1.22457	1.21885	1.22793		
November	4	2024	314.84650	1.22373	1.22463	1.21891	1.22799		
November	5	2024	314.86333	1.22380	1.22470	1.21898	1.22806		
November	6	2024	314.88017	1.22386	1.22476	1.21904	1.22812		
November	7	2024	314.89700	1.22393	1.22483	1.21911	1.22819		
November	8	2024	314.91383	1.22399	1.22489	1.21917	1.22825		
November	9	2024	314.93067	1.22406	1.22496	1.21924	1.22832		
November	10	2024	314.94750	1.22413	1.22502	1.21930	1.22839		
November	11	2024	314.96433	1.22419	1.22509	1.21937	1.22845		
November	12	2024	314.98117	1.22426	1.22515	1.21943	1.22852		
November	13	2024	314.99800	1.22432	1.22522	1.21950	1.22858		
November	14	2024	315.01483	1.22439	1.22529	1.21957	1.22865		
November	15	2024	315.03167	1.22445	1.22535	1.21963	1.22871		
November	16	2024	315.04850	1.22452	1.22542	1.21970	1.22878		
November	17	2024	315.06533	1.22458	1.22548	1.21976	1.22885		
November	18	2024	315.08217	1.22465	1.22555	1.21983	1.22891		
November	19	2024	315.09900	1.22471	1.22561	1.21989	1.22898		
November	20	2024	315.11583	1.22478	1.22568	1.21996	1.22904		
November	21	2024	315.13267	1.22485	1.22574	1.22002	1.22911		
November	22	2024	315.14950	1.22491	1.22581	1.22009	1.22917		
November	23	2024	315.16633	1.22498	1.22587	1.22015	1.22924		
November	24	2024	315.18317	1.22504	1.22594	1.22022	1.22931		
November	25	2024	315.20000	1.22511	1.22601	1.22028	1.22937		
November	26	2024	315.21683	1.22517	1.22607	1.22035	1.22944		
November	27	2024	315.23367	1.22524	1.22614	1.22041	1.22950		
November	28	2024	315.25050	1.22530	1.22620	1.22048	1.22957		
November	29	2024	315.26733	1.22537	1.22627	1.22054	1.22963		
November	30	2024	315.28417	1.22543	1.22633	1.22061	1.22970		
CPI-U (NSA) for:				July 2024	314.540	August 2024	314.796	September 2024	315.301

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)

Ref CPI and Index Ratios for

November 2024

Security: Description: CUSIP Number: Dated Date: Original Issue Date: Additional Issue Date(s):				0-1/8% 5-Year TIPS Series AE-2025 91282CAQ4 October 15, 2020 October 30, 2020 December 31, 2020	0-1/8% 10-Year TIPS Series A-2031 91282CBF7 January 15, 2021 January 29, 2021 March 31, 2021 May 28, 2021	0-1/8% 30-Year TIPS TIPS of February 2051 912810SV1 February 15, 2021 February 26, 2021 August 31, 2021	0-1/8% 5-Year TIPS Series X-2026 91282CCA7 April 15, 2021 April 30, 2021 June 30, 2021		
Maturity Date: Ref CPI on Dated Date:				October 15, 2025 259.46997	January 15, 2031 260.31619	February 15, 2051 260.35150	April 15, 2026 262.25027		
Date				Ref CPI	Index Ratio	Index Ratio	Index Ratio	Index Ratio	
November	1	2024	314.79600	1.21323	1.20928	1.20912	1.20036		
November	2	2024	314.81283	1.21329	1.20935	1.20918	1.20043		
November	3	2024	314.82967	1.21336	1.20941	1.20925	1.20049		
November	4	2024	314.84650	1.21342	1.20948	1.20931	1.20056		
November	5	2024	314.86333	1.21349	1.20954	1.20938	1.20062		
November	6	2024	314.88017	1.21355	1.20961	1.20944	1.20069		
November	7	2024	314.89700	1.21362	1.20967	1.20951	1.20075		
November	8	2024	314.91383	1.21368	1.20974	1.20957	1.20081		
November	9	2024	314.93067	1.21375	1.20980	1.20964	1.20088		
November	10	2024	314.94750	1.21381	1.20987	1.20970	1.20094		
November	11	2024	314.96433	1.21388	1.20993	1.20977	1.20101		
November	12	2024	314.98117	1.21394	1.20999	1.20983	1.20107		
November	13	2024	314.99800	1.21401	1.21006	1.20990	1.20114		
November	14	2024	315.01483	1.21407	1.21012	1.20996	1.20120		
November	15	2024	315.03167	1.21414	1.21019	1.21002	1.20126		
November	16	2024	315.04850	1.21420	1.21025	1.21009	1.20133		
November	17	2024	315.06533	1.21427	1.21032	1.21015	1.20139		
November	18	2024	315.08217	1.21433	1.21038	1.21022	1.20146		
November	19	2024	315.09900	1.21439	1.21045	1.21028	1.20152		
November	20	2024	315.11583	1.21446	1.21051	1.21035	1.20158		
November	21	2024	315.13267	1.21452	1.21058	1.21041	1.20165		
November	22	2024	315.14950	1.21459	1.21064	1.21048	1.20171		
November	23	2024	315.16633	1.21465	1.21071	1.21054	1.20178		
November	24	2024	315.18317	1.21472	1.21077	1.21061	1.20184		
November	25	2024	315.20000	1.21478	1.21084	1.21067	1.20191		
November	26	2024	315.21683	1.21485	1.21090	1.21074	1.20197		
November	27	2024	315.23367	1.21491	1.21096	1.21080	1.20203		
November	28	2024	315.25050	1.21498	1.21103	1.21086	1.20210		
November	29	2024	315.26733	1.21504	1.21109	1.21093	1.20216		
November	30	2024	315.28417	1.21511	1.21116	1.21099	1.20223		
CPI-U (NSA) for:				July 2024	314.540	August 2024	314.796	September 2024	315.301

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)

Ref CPI and Index Ratios for

November 2024

Security: Description: CUSIP Number: Dated Date: Original Issue Date: Additional Issue Date(s):				0-1/8% 10-Year TIPS Series D-2031 91282CCM1 July 15, 2021 July 30, 2021 September 30, 2021 November 30, 2021		0-1/8% 5-Year TIPS Series AE-2026 91282CDC2 October 15, 2021 October 29, 2021 December 31, 2021		0-1/8% 10-Year TIPS Series A-2032 91282CDX6 January 15, 2022 January 31, 2022 March 31, 2022 May 31, 2022		0-1/8% 30-Year TIPS TIPS of February 2052 912810TE8 February 15, 2022 February 28, 2022 August 31, 2022	
Maturity Date: Ref CPI on Dated Date:				July 15, 2031 268.02090		October 15, 2026 273.25771		January 15, 2032 277.20274		February 15, 2052 278.37500	
Date				Ref CPI		Index Ratio		Index Ratio		Index Ratio	
November	1	2024	314.79600	1.17452	1.15201	1.13562	1.13083				
November	2	2024	314.81283	1.17458	1.15207	1.13568	1.13089				
November	3	2024	314.82967	1.17465	1.15213	1.13574	1.13096				
November	4	2024	314.84650	1.17471	1.15220	1.13580	1.13102				
November	5	2024	314.86333	1.17477	1.15226	1.13586	1.13108				
November	6	2024	314.88017	1.17483	1.15232	1.13592	1.13114				
November	7	2024	314.89700	1.17490	1.15238	1.13598	1.13120				
November	8	2024	314.91383	1.17496	1.15244	1.13604	1.13126				
November	9	2024	314.93067	1.17502	1.15250	1.13610	1.13132				
November	10	2024	314.94750	1.17509	1.15257	1.13616	1.13138				
November	11	2024	314.96433	1.17515	1.15263	1.13622	1.13144				
November	12	2024	314.98117	1.17521	1.15269	1.13628	1.13150				
November	13	2024	314.99800	1.17527	1.15275	1.13635	1.13156				
November	14	2024	315.01483	1.17534	1.15281	1.13641	1.13162				
November	15	2024	315.03167	1.17540	1.15287	1.13647	1.13168				
November	16	2024	315.04850	1.17546	1.15294	1.13653	1.13174				
November	17	2024	315.06533	1.17553	1.15300	1.13659	1.13180				
November	18	2024	315.08217	1.17559	1.15306	1.13665	1.13186				
November	19	2024	315.09900	1.17565	1.15312	1.13671	1.13192				
November	20	2024	315.11583	1.17571	1.15318	1.13677	1.13198				
November	21	2024	315.13267	1.17578	1.15324	1.13683	1.13204				
November	22	2024	315.14950	1.17584	1.15331	1.13689	1.13210				
November	23	2024	315.16633	1.17590	1.15337	1.13695	1.13216				
November	24	2024	315.18317	1.17596	1.15343	1.13701	1.13223				
November	25	2024	315.20000	1.17603	1.15349	1.13707	1.13229				
November	26	2024	315.21683	1.17609	1.15355	1.13713	1.13235				
November	27	2024	315.23367	1.17615	1.15361	1.13720	1.13241				
November	28	2024	315.25050	1.17622	1.15367	1.13726	1.13247				
November	29	2024	315.26733	1.17628	1.15374	1.13732	1.13253				
November	30	2024	315.28417	1.17634	1.15380	1.13738	1.13259				
CPI-U (NSA) for:				July 2024	314.540	August 2024	314.796	September 2024	315.301		

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)

Ref CPI and Index Ratios for

November 2024

Security: Description: CUSIP Number: Dated Date: Original Issue Date: Additional Issue Date(s):				0-1/8% 5-Year TIPS Series X-2027 91282CEJ6 April 15, 2022 April 29, 2022 June 30, 2022	0-5/8% 10-Year TIPS Series D-2032 91282CEZ0 July 15, 2022 July 29, 2022 September 30, 2022 November 30, 2022	1-5/8% 5-Year TIPS Series AE-2027 91282CFR7 October 15, 2022 October 31, 2022 December 30, 2022	1-1/8% 10-Year TIPS Series A-2033 91282CGK1 January 15, 2023 January 31, 2023 March 31, 2023 May 31, 2023		
Maturity Date: Ref CPI on Dated Date:				April 15, 2027 282.34640	July 15, 2032 290.54829	October 15, 2027 296.22858	January 15, 2033 297.87606		
Date				Ref CPI	Index Ratio	Index Ratio	Index Ratio	Index Ratio	
November	1	2024	314.79600	1.11493	1.08346	1.06268	1.05680		
November	2	2024	314.81283	1.11499	1.08351	1.06274	1.05686		
November	3	2024	314.82967	1.11505	1.08357	1.06279	1.05691		
November	4	2024	314.84650	1.11511	1.08363	1.06285	1.05697		
November	5	2024	314.86333	1.11517	1.08369	1.06291	1.05703		
November	6	2024	314.88017	1.11523	1.08374	1.06296	1.05708		
November	7	2024	314.89700	1.11529	1.08380	1.06302	1.05714		
November	8	2024	314.91383	1.11535	1.08386	1.06308	1.05720		
November	9	2024	314.93067	1.11541	1.08392	1.06313	1.05725		
November	10	2024	314.94750	1.11546	1.08398	1.06319	1.05731		
November	11	2024	314.96433	1.11552	1.08403	1.06325	1.05737		
November	12	2024	314.98117	1.11558	1.08409	1.06330	1.05742		
November	13	2024	314.99800	1.11564	1.08415	1.06336	1.05748		
November	14	2024	315.01483	1.11570	1.08421	1.06342	1.05754		
November	15	2024	315.03167	1.11576	1.08427	1.06347	1.05759		
November	16	2024	315.04850	1.11582	1.08432	1.06353	1.05765		
November	17	2024	315.06533	1.11588	1.08438	1.06359	1.05771		
November	18	2024	315.08217	1.11594	1.08444	1.06365	1.05776		
November	19	2024	315.09900	1.11600	1.08450	1.06370	1.05782		
November	20	2024	315.11583	1.11606	1.08456	1.06376	1.05788		
November	21	2024	315.13267	1.11612	1.08461	1.06382	1.05793		
November	22	2024	315.14950	1.11618	1.08467	1.06387	1.05799		
November	23	2024	315.16633	1.11624	1.08473	1.06393	1.05805		
November	24	2024	315.18317	1.11630	1.08479	1.06399	1.05810		
November	25	2024	315.20000	1.11636	1.08485	1.06404	1.05816		
November	26	2024	315.21683	1.11642	1.08490	1.06410	1.05821		
November	27	2024	315.23367	1.11648	1.08496	1.06416	1.05827		
November	28	2024	315.25050	1.11654	1.08502	1.06421	1.05833		
November	29	2024	315.26733	1.11660	1.08508	1.06427	1.05838		
November	30	2024	315.28417	1.11666	1.08514	1.06433	1.05844		
CPI-U (NSA) for:				July 2024	314.540	August 2024	314.796	September 2024	315.301

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)

Ref CPI and Index Ratios for

November 2024

Security: Description: CUSIP Number: Dated Date: Original Issue Date: Additional Issue Date(s):				1-1/2% 30-Year TIPS TIPS of February 2053 912810TP3 February 15, 2023 February 28, 2023 August 31, 2023	1-1/4% 5-Year TIPS Series X-2028 91282CGW5 April 15, 2023 April 28, 2023 June 30, 2023	1-3/8% 10-Year TIPS Series D-2033 91282CHP9 July 15, 2023 July 31, 2023 September 29, 2023 November 30, 2023	2-3/8% 5-Year TIPS Series AE-2028 91282CJH5 October 15, 2023 October 31, 2023 December 29, 2023		
Maturity Date: Ref CPI on Dated Date:				February 15, 2053 297.25400	April 15, 2028 299.94933	July 15, 2033 303.70803	October 15, 2028 306.29390		
Date				Ref CPI	Index Ratio	Index Ratio	Index Ratio	Index Ratio	
November	1	2024	314.79600	1.05901	1.04950	1.03651	1.02776		
November	2	2024	314.81283	1.05907	1.04955	1.03656	1.02781		
November	3	2024	314.82967	1.05913	1.04961	1.03662	1.02787		
November	4	2024	314.84650	1.05918	1.04967	1.03667	1.02792		
November	5	2024	314.86333	1.05924	1.04972	1.03673	1.02798		
November	6	2024	314.88017	1.05930	1.04978	1.03679	1.02803		
November	7	2024	314.89700	1.05935	1.04983	1.03684	1.02809		
November	8	2024	314.91383	1.05941	1.04989	1.03690	1.02814		
November	9	2024	314.93067	1.05947	1.04995	1.03695	1.02820		
November	10	2024	314.94750	1.05952	1.05000	1.03701	1.02825		
November	11	2024	314.96433	1.05958	1.05006	1.03706	1.02831		
November	12	2024	314.98117	1.05964	1.05011	1.03712	1.02836		
November	13	2024	314.99800	1.05969	1.05017	1.03717	1.02842		
November	14	2024	315.01483	1.05975	1.05023	1.03723	1.02847		
November	15	2024	315.03167	1.05981	1.05028	1.03728	1.02853		
November	16	2024	315.04850	1.05986	1.05034	1.03734	1.02858		
November	17	2024	315.06533	1.05992	1.05040	1.03740	1.02864		
November	18	2024	315.08217	1.05998	1.05045	1.03745	1.02869		
November	19	2024	315.09900	1.06003	1.05051	1.03751	1.02875		
November	20	2024	315.11583	1.06009	1.05056	1.03756	1.02880		
November	21	2024	315.13267	1.06015	1.05062	1.03762	1.02886		
November	22	2024	315.14950	1.06020	1.05068	1.03767	1.02891		
November	23	2024	315.16633	1.06026	1.05073	1.03773	1.02897		
November	24	2024	315.18317	1.06032	1.05079	1.03778	1.02902		
November	25	2024	315.20000	1.06037	1.05084	1.03784	1.02908		
November	26	2024	315.21683	1.06043	1.05090	1.03789	1.02913		
November	27	2024	315.23367	1.06049	1.05096	1.03795	1.02919		
November	28	2024	315.25050	1.06054	1.05101	1.03801	1.02924		
November	29	2024	315.26733	1.06060	1.05107	1.03806	1.02930		
November	30	2024	315.28417	1.06066	1.05112	1.03812	1.02935		
CPI-U (NSA) for:				July 2024	314.540	August 2024	314.796	September 2024	315.301

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)

Ref CPI and Index Ratios for

November 2024

Security: Description: CUSIP Number: Dated Date: Original Issue Date: Additional Issue Date(s):				1-3/4% 10-Year TIPS Series A-2034 91282CJY8 January 15, 2024 January 31, 2024 March 28, 2024 May 31, 2024	2-1/8% 30-Year TIPS TIPS of February 2054 912810TY4 February 15, 2024 February 29, 2024 August 30, 2024	2-1/8% 5-Year TIPS Series X-2029 91282CKL4 April 15, 2024 April 30, 2024 June 28, 2024	1-7/8% 10-Year TIPS Series D-2034 91282CLE9 July 15, 2024 July 31, 2024 September 30, 2024		
Maturity Date: Ref CPI on Dated Date:				January 15, 2034 307.39100	February 15, 2054 306.90376	April 15, 2029 309.30787	July 15, 2034 313.78329		
Date				Ref CPI	Index Ratio	Index Ratio	Index Ratio	Index Ratio	
November	1	2024	314.79600	1.02409	1.02572	1.01774	1.00323		
November	2	2024	314.81283	1.02414	1.02577	1.01780	1.00328		
November	3	2024	314.82967	1.02420	1.02583	1.01785	1.00333		
November	4	2024	314.84650	1.02425	1.02588	1.01791	1.00339		
November	5	2024	314.86333	1.02431	1.02594	1.01796	1.00344		
November	6	2024	314.88017	1.02436	1.02599	1.01802	1.00350		
November	7	2024	314.89700	1.02442	1.02604	1.01807	1.00355		
November	8	2024	314.91383	1.02447	1.02610	1.01812	1.00360		
November	9	2024	314.93067	1.02453	1.02615	1.01818	1.00366		
November	10	2024	314.94750	1.02458	1.02621	1.01823	1.00371		
November	11	2024	314.96433	1.02464	1.02626	1.01829	1.00376		
November	12	2024	314.98117	1.02469	1.02632	1.01834	1.00382		
November	13	2024	314.99800	1.02475	1.02637	1.01840	1.00387		
November	14	2024	315.01483	1.02480	1.02643	1.01845	1.00392		
November	15	2024	315.03167	1.02486	1.02648	1.01851	1.00398		
November	16	2024	315.04850	1.02491	1.02654	1.01856	1.00403		
November	17	2024	315.06533	1.02497	1.02659	1.01861	1.00409		
November	18	2024	315.08217	1.02502	1.02665	1.01867	1.00414		
November	19	2024	315.09900	1.02508	1.02670	1.01872	1.00419		
November	20	2024	315.11583	1.02513	1.02676	1.01878	1.00425		
November	21	2024	315.13267	1.02519	1.02681	1.01883	1.00430		
November	22	2024	315.14950	1.02524	1.02687	1.01889	1.00435		
November	23	2024	315.16633	1.02529	1.02692	1.01894	1.00441		
November	24	2024	315.18317	1.02535	1.02698	1.01899	1.00446		
November	25	2024	315.20000	1.02540	1.02703	1.01905	1.00451		
November	26	2024	315.21683	1.02546	1.02709	1.01910	1.00457		
November	27	2024	315.23367	1.02551	1.02714	1.01916	1.00462		
November	28	2024	315.25050	1.02557	1.02720	1.01921	1.00468		
November	29	2024	315.26733	1.02562	1.02725	1.01927	1.00473		
November	30	2024	315.28417	1.02568	1.02731	1.01932	1.00478		
CPI-U (NSA) for:				July 2024	314.540	August 2024	314.796	September 2024	315.301