

**TREASURY INFLATION-PROTECTED SECURITIES (TIPS)**  
**Ref CPI and Index Ratios for**  
**November 2021**

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	
November 1 2021	273.56700	1.69140	1.66410	1.54122	1.45131	
November 2 2021	273.59177	1.69155	1.66425	1.54136	1.45144	
November 3 2021	273.61653	1.69171	1.66440	1.54150	1.45157	
November 4 2021	273.64130	1.69186	1.66455	1.54164	1.45170	
November 5 2021	273.66607	1.69201	1.66470	1.54178	1.45183	
November 6 2021	273.69083	1.69217	1.66485	1.54192	1.45197	
November 7 2021	273.71560	1.69232	1.66500	1.54206	1.45210	
November 8 2021	273.74037	1.69247	1.66515	1.54220	1.45223	
November 9 2021	273.76513	1.69262	1.66531	1.54234	1.45236	
November 10 2021	273.78990	1.69278	1.66546	1.54248	1.45249	
November 11 2021	273.81467	1.69293	1.66561	1.54262	1.45262	
November 12 2021	273.83943	1.69308	1.66576	1.54276	1.45275	
November 13 2021	273.86420	1.69324	1.66591	1.54290	1.45289	
November 14 2021	273.88897	1.69339	1.66606	1.54304	1.45302	
November 15 2021	273.91373	1.69354	1.66621	1.54318	1.45315	
November 16 2021	273.93850	1.69370	1.66636	1.54332	1.45328	
November 17 2021	273.96327	1.69385	1.66651	1.54346	1.45341	
November 18 2021	273.98803	1.69400	1.66666	1.54359	1.45354	
November 19 2021	274.01280	1.69416	1.66681	1.54373	1.45367	
November 20 2021	274.03757	1.69431	1.66696	1.54387	1.45381	
November 21 2021	274.06233	1.69446	1.66711	1.54401	1.45394	
November 22 2021	274.08710	1.69462	1.66726	1.54415	1.45407	
November 23 2021	274.11187	1.69477	1.66741	1.54429	1.45420	
November 24 2021	274.13663	1.69492	1.66757	1.54443	1.45433	
November 25 2021	274.16140	1.69507	1.66772	1.54457	1.45446	
November 26 2021	274.18617	1.69523	1.66787	1.54471	1.45459	
November 27 2021	274.21093	1.69538	1.66802	1.54485	1.45472	
November 28 2021	274.23570	1.69553	1.66817	1.54499	1.45486	
November 29 2021	274.26047	1.69569	1.66832	1.54513	1.45499	
November 30 2021	274.28523	1.69584	1.66847	1.54527	1.45512	
<b>CPI-U (NSA) for:</b>			<b>July 2021 273.003</b>	<b>August 2021 273.567</b>	<b>September 2021 274.31</b>	

**TREASURY INFLATION-PROTECTED SECURITIES (TIPS)**  
**Ref CPI and Index Ratios for**  
**November 2021**

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	2-1/2% 20-Year TIPS TIPS of January 2029 912810PZ5 January 15, 2009 January 30, 2009 July 31, 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, 2029 214.69971
Date	Ref CPI	Index Ratio	Index Ratio	Index Ratio	Index Ratio	
November 1 2021	273.56700	1.37833	1.35655	1.30583	1.27418	
November 2 2021	273.59177	1.37845	1.35667	1.30595	1.27430	
November 3 2021	273.61653	1.37858	1.35679	1.30607	1.27441	
November 4 2021	273.64130	1.37870	1.35691	1.30619	1.27453	
November 5 2021	273.66607	1.37883	1.35704	1.30630	1.27465	
November 6 2021	273.69083	1.37895	1.35716	1.30642	1.27476	
November 7 2021	273.71560	1.37908	1.35728	1.30654	1.27488	
November 8 2021	273.74037	1.37920	1.35740	1.30666	1.27499	
November 9 2021	273.76513	1.37933	1.35753	1.30678	1.27511	
November 10 2021	273.78990	1.37945	1.35765	1.30690	1.27522	
November 11 2021	273.81467	1.37958	1.35777	1.30701	1.27534	
November 12 2021	273.83943	1.37970	1.35790	1.30713	1.27545	
November 13 2021	273.86420	1.37983	1.35802	1.30725	1.27557	
November 14 2021	273.88897	1.37995	1.35814	1.30737	1.27568	
November 15 2021	273.91373	1.38008	1.35826	1.30749	1.27580	
November 16 2021	273.93850	1.38020	1.35839	1.30760	1.27591	
November 17 2021	273.96327	1.38032	1.35851	1.30772	1.27603	
November 18 2021	273.98803	1.38045	1.35863	1.30784	1.27615	
November 19 2021	274.01280	1.38057	1.35876	1.30796	1.27626	
November 20 2021	274.03757	1.38070	1.35888	1.30808	1.27638	
November 21 2021	274.06233	1.38082	1.35900	1.30820	1.27649	
November 22 2021	274.08710	1.38095	1.35912	1.30831	1.27661	
November 23 2021	274.11187	1.38107	1.35925	1.30843	1.27672	
November 24 2021	274.13663	1.38120	1.35937	1.30855	1.27684	
November 25 2021	274.16140	1.38132	1.35949	1.30867	1.27695	
November 26 2021	274.18617	1.38145	1.35962	1.30879	1.27707	
November 27 2021	274.21093	1.38157	1.35974	1.30890	1.27718	
November 28 2021	274.23570	1.38170	1.35986	1.30902	1.27730	
November 29 2021	274.26047	1.38182	1.35998	1.30914	1.27741	
November 30 2021	274.28523	1.38195	1.36011	1.30926	1.27753	
<b>CPI-U (NSA) for:</b>	<b>July 2021</b>	<b>273.003</b>	<b>August 2021</b>	<b>273.567</b>	<b>September 2021</b>	<b>274.31</b>

**TREASURY INFLATION-PROTECTED SECURITIES (TIPS)**  
**Ref CPI and Index Ratios for**  
**November 2021**

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	0-1/8% 10-Year TIPS Series A-2022 912828SA9 January 15, 2012 January 31, 2012 March 30, 2012 May 31, 2012	0-3/4% 30-Year TIPS TIPS of February 2042 912810QV3 February 15, 2012 February 29, 2012 June 29, 2012 October 31, 2012
Maturity Date: Ref CPI on Dated Date:			February 15, 2040 216.13950	February 15, 2041 218.99100	January 15, 2022 226.33474	February 15, 2042 225.96062
Date	Ref CPI	Index Ratio	Index Ratio	Index Ratio	Index Ratio	
November 1 2021	273.56700	1.26570	1.24922	1.20868	1.21068	
November 2 2021	273.59177	1.26581	1.24933	1.20879	1.21079	
November 3 2021	273.61653	1.26593	1.24944	1.20890	1.21090	
November 4 2021	273.64130	1.26604	1.24956	1.20901	1.21101	
November 5 2021	273.66607	1.26615	1.24967	1.20912	1.21112	
November 6 2021	273.69083	1.26627	1.24978	1.20923	1.21123	
November 7 2021	273.71560	1.26638	1.24989	1.20934	1.21134	
November 8 2021	273.74037	1.26650	1.25001	1.20945	1.21145	
November 9 2021	273.76513	1.26661	1.25012	1.20956	1.21156	
November 10 2021	273.78990	1.26673	1.25023	1.20967	1.21167	
November 11 2021	273.81467	1.26684	1.25035	1.20978	1.21178	
November 12 2021	273.83943	1.26696	1.25046	1.20989	1.21189	
November 13 2021	273.86420	1.26707	1.25057	1.21000	1.21200	
November 14 2021	273.88897	1.26719	1.25069	1.21011	1.21211	
November 15 2021	273.91373	1.26730	1.25080	1.21022	1.21222	
November 16 2021	273.93850	1.26742	1.25091	1.21032	1.21233	
November 17 2021	273.96327	1.26753	1.25103	1.21043	1.21244	
November 18 2021	273.98803	1.26764	1.25114	1.21054	1.21255	
November 19 2021	274.01280	1.26776	1.25125	1.21065	1.21266	
November 20 2021	274.03757	1.26787	1.25136	1.21076	1.21277	
November 21 2021	274.06233	1.26799	1.25148	1.21087	1.21288	
November 22 2021	274.08710	1.26810	1.25159	1.21098	1.21299	
November 23 2021	274.11187	1.26822	1.25170	1.21109	1.21310	
November 24 2021	274.13663	1.26833	1.25182	1.21120	1.21321	
November 25 2021	274.16140	1.26845	1.25193	1.21131	1.21331	
November 26 2021	274.18617	1.26856	1.25204	1.21142	1.21342	
November 27 2021	274.21093	1.26868	1.25216	1.21153	1.21353	
November 28 2021	274.23570	1.26879	1.25227	1.21164	1.21364	
November 29 2021	274.26047	1.26890	1.25238	1.21175	1.21375	
November 30 2021	274.28523	1.26902	1.25250	1.21186	1.21386	
<b>CPI-U (NSA) for:</b>	<b>July 2021</b>	<b>273.003</b>	<b>August 2021</b>	<b>273.567</b>	<b>September 2021</b>	<b>274.31</b>

**TREASURY INFLATION-PROTECTED SECURITIES (TIPS)**  
**Ref CPI and Index Ratios for**  
**November 2021**

Security: Description: CUSIP Number: Dated Date: Original Issue Date: Additional Issue Date(s):			0-1/8% 10-Year TIPS Series D-2022 912828TE0 July 15, 2012 July 31, 2012 September 28, 2012 November 30, 2012	0-1/8% 10-Year TIPS Series A-2023 912828UH1 January 15, 2013 January 31, 2013 March 28, 2013 May 31, 2013	0-5/8% 30-Year TIPS TIPS of February 2043 912810RA8 February 15, 2013 February 28, 2013 June 28, 2013 October 31, 2013	0-3/8% 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:			July 15, 2022 229.96306	January 15, 2023 230.82203	February 15, 2043 229.91100	July 15, 2023 232.71797
Date	Ref CPI	Index Ratio	Index Ratio	Index Ratio	Index Ratio	
November 1 2021	273.56700	1.18961	1.18519	1.18988	1.17553	
November 2 2021	273.59177	1.18972	1.18529	1.18999	1.17564	
November 3 2021	273.61653	1.18983	1.18540	1.19010	1.17574	
November 4 2021	273.64130	1.18994	1.18551	1.19021	1.17585	
November 5 2021	273.66607	1.19004	1.18562	1.19031	1.17596	
November 6 2021	273.69083	1.19015	1.18572	1.19042	1.17606	
November 7 2021	273.71560	1.19026	1.18583	1.19053	1.17617	
November 8 2021	273.74037	1.19037	1.18594	1.19064	1.17628	
November 9 2021	273.76513	1.19047	1.18604	1.19074	1.17638	
November 10 2021	273.78990	1.19058	1.18615	1.19085	1.17649	
November 11 2021	273.81467	1.19069	1.18626	1.19096	1.17659	
November 12 2021	273.83943	1.19080	1.18637	1.19107	1.17670	
November 13 2021	273.86420	1.19091	1.18647	1.19117	1.17681	
November 14 2021	273.88897	1.19101	1.18658	1.19128	1.17691	
November 15 2021	273.91373	1.19112	1.18669	1.19139	1.17702	
November 16 2021	273.93850	1.19123	1.18680	1.19150	1.17713	
November 17 2021	273.96327	1.19134	1.18690	1.19161	1.17723	
November 18 2021	273.98803	1.19144	1.18701	1.19171	1.17734	
November 19 2021	274.01280	1.19155	1.18712	1.19182	1.17745	
November 20 2021	274.03757	1.19166	1.18722	1.19193	1.17755	
November 21 2021	274.06233	1.19177	1.18733	1.19204	1.17766	
November 22 2021	274.08710	1.19187	1.18744	1.19214	1.17777	
November 23 2021	274.11187	1.19198	1.18755	1.19225	1.17787	
November 24 2021	274.13663	1.19209	1.18765	1.19236	1.17798	
November 25 2021	274.16140	1.19220	1.18776	1.19247	1.17808	
November 26 2021	274.18617	1.19231	1.18787	1.19258	1.17819	
November 27 2021	274.21093	1.19241	1.18798	1.19268	1.17830	
November 28 2021	274.23570	1.19252	1.18808	1.19279	1.17840	
November 29 2021	274.26047	1.19263	1.18819	1.19290	1.17851	
November 30 2021	274.28523	1.19274	1.18830	1.19301	1.17862	
<b>CPI-U (NSA) for:</b>	<b>July 2021</b>	<b>273.003</b>	<b>August 2021</b>	<b>273.567</b>	<b>September 2021</b>	<b>274.31</b>

**TREASURY INFLATION-PROTECTED SECURITIES (TIPS)**  
**Ref CPI and Index Ratios for**  
**November 2021**

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% 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
Maturity Date: Ref CPI on Dated Date:			January 15, 2024 233.33058	February 15, 2044 233.05900	July 15, 2024 237.44594	January 15, 2025 236.85403
Date	Ref CPI	Index Ratio	Index Ratio	Index Ratio	Index Ratio	
November 1 2021	273.56700	1.17244	1.17381	1.15212	1.15500	
November 2 2021	273.59177	1.17255	1.17392	1.15223	1.15511	
November 3 2021	273.61653	1.17266	1.17402	1.15233	1.15521	
November 4 2021	273.64130	1.17276	1.17413	1.15244	1.15532	
November 5 2021	273.66607	1.17287	1.17424	1.15254	1.15542	
November 6 2021	273.69083	1.17297	1.17434	1.15264	1.15553	
November 7 2021	273.71560	1.17308	1.17445	1.15275	1.15563	
November 8 2021	273.74037	1.17319	1.17455	1.15285	1.15573	
November 9 2021	273.76513	1.17329	1.17466	1.15296	1.15584	
November 10 2021	273.78990	1.17340	1.17477	1.15306	1.15594	
November 11 2021	273.81467	1.17351	1.17487	1.15317	1.15605	
November 12 2021	273.83943	1.17361	1.17498	1.15327	1.15615	
November 13 2021	273.86420	1.17372	1.17509	1.15337	1.15626	
November 14 2021	273.88897	1.17382	1.17519	1.15348	1.15636	
November 15 2021	273.91373	1.17393	1.17530	1.15358	1.15647	
November 16 2021	273.93850	1.17404	1.17540	1.15369	1.15657	
November 17 2021	273.96327	1.17414	1.17551	1.15379	1.15668	
November 18 2021	273.98803	1.17425	1.17562	1.15390	1.15678	
November 19 2021	274.01280	1.17435	1.17572	1.15400	1.15688	
November 20 2021	274.03757	1.17446	1.17583	1.15411	1.15699	
November 21 2021	274.06233	1.17457	1.17594	1.15421	1.15709	
November 22 2021	274.08710	1.17467	1.17604	1.15431	1.15720	
November 23 2021	274.11187	1.17478	1.17615	1.15442	1.15730	
November 24 2021	274.13663	1.17489	1.17625	1.15452	1.15741	
November 25 2021	274.16140	1.17499	1.17636	1.15463	1.15751	
November 26 2021	274.18617	1.17510	1.17647	1.15473	1.15762	
November 27 2021	274.21093	1.17520	1.17657	1.15484	1.15772	
November 28 2021	274.23570	1.17531	1.17668	1.15494	1.15783	
November 29 2021	274.26047	1.17542	1.17679	1.15504	1.15793	
November 30 2021	274.28523	1.17552	1.17689	1.15515	1.15803	
<b>CPI-U (NSA) for:</b>	<b>July 2021</b>	<b>273.003</b>	<b>August 2021</b>	<b>273.567</b>	<b>September 2021</b>	<b>274.31</b>

**TREASURY INFLATION-PROTECTED SECURITIES (TIPS)**  
**Ref CPI and Index Ratios for**  
**November 2021**

Security: Description: CUSIP Number: Dated Date: Original Issue Date: Additional Issue Date(s):			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	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:			February 15, 2045 235.48150	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	
November 1 2021	273.56700	1.16173	1.15359	1.15132	1.15456	
November 2 2021	273.59177	1.16184	1.15370	1.15143	1.15467	
November 3 2021	273.61653	1.16194	1.15380	1.15153	1.15477	
November 4 2021	273.64130	1.16205	1.15391	1.15163	1.15488	
November 5 2021	273.66607	1.16216	1.15401	1.15174	1.15498	
November 6 2021	273.69083	1.16226	1.15411	1.15184	1.15508	
November 7 2021	273.71560	1.16237	1.15422	1.15195	1.15519	
November 8 2021	273.74037	1.16247	1.15432	1.15205	1.15529	
November 9 2021	273.76513	1.16258	1.15443	1.15216	1.15540	
November 10 2021	273.78990	1.16268	1.15453	1.15226	1.15550	
November 11 2021	273.81467	1.16279	1.15464	1.15236	1.15561	
November 12 2021	273.83943	1.16289	1.15474	1.15247	1.15571	
November 13 2021	273.86420	1.16300	1.15485	1.15257	1.15582	
November 14 2021	273.88897	1.16310	1.15495	1.15268	1.15592	
November 15 2021	273.91373	1.16321	1.15505	1.15278	1.15602	
November 16 2021	273.93850	1.16331	1.15516	1.15289	1.15613	
November 17 2021	273.96327	1.16342	1.15526	1.15299	1.15623	
November 18 2021	273.98803	1.16352	1.15537	1.15309	1.15634	
November 19 2021	274.01280	1.16363	1.15547	1.15320	1.15644	
November 20 2021	274.03757	1.16373	1.15558	1.15330	1.15655	
November 21 2021	274.06233	1.16384	1.15568	1.15341	1.15665	
November 22 2021	274.08710	1.16394	1.15579	1.15351	1.15676	
November 23 2021	274.11187	1.16405	1.15589	1.15361	1.15686	
November 24 2021	274.13663	1.16415	1.15599	1.15372	1.15697	
November 25 2021	274.16140	1.16426	1.15610	1.15382	1.15707	
November 26 2021	274.18617	1.16436	1.15620	1.15393	1.15717	
November 27 2021	274.21093	1.16447	1.15631	1.15403	1.15728	
November 28 2021	274.23570	1.16457	1.15641	1.15414	1.15738	
November 29 2021	274.26047	1.16468	1.15652	1.15424	1.15749	
November 30 2021	274.28523	1.16478	1.15662	1.15434	1.15759	
<b>CPI-U (NSA) for:</b>	<b>July 2021</b>	<b>273.003</b>	<b>August 2021</b>	<b>273.567</b>	<b>September 2021</b>	<b>274.31</b>

**TREASURY INFLATION-PROTECTED SECURITIES (TIPS)**  
**Ref CPI and Index Ratios for**  
**November 2021**

Security: Description: CUSIP Number: Dated Date: Original Issue Date: Additional Issue Date(s):			0-1/8% 10-Year TIPS Series D-2026 912828S50 July 15, 2016 July 29, 2016 September 30, 2016 November 30, 2016	0-3/8% 10-Year TIPS Series A-2027 912828V49 January 15, 2017 January 31, 2017 March 31, 2017 May 31, 2017	0-7/8% 30-Year TIPS TIPS of February 2047 912810RW0 February 15, 2017 February 28, 2017 June 30, 2017 October 31, 2017	0-1/8% 5-Year TIPS Series X-2022 912828X39 April 15, 2017 April 28, 2017 August 31, 2017 December 29, 2017
Maturity Date: Ref CPI on Dated Date:			July 15, 2026 239.70132	January 15, 2027 241.55919	February 15, 2047 241.39250	April 15, 2022 243.19553
Date	Ref CPI	Index Ratio	Index Ratio	Index Ratio	Index Ratio	
November 1 2021	273.56700	1.14128	1.13251	1.13329	1.12488	
November 2 2021	273.59177	1.14139	1.13261	1.13339	1.12499	
November 3 2021	273.61653	1.14149	1.13271	1.13349	1.12509	
November 4 2021	273.64130	1.14159	1.13281	1.13359	1.12519	
November 5 2021	273.66607	1.14170	1.13292	1.13370	1.12529	
November 6 2021	273.69083	1.14180	1.13302	1.13380	1.12539	
November 7 2021	273.71560	1.14190	1.13312	1.13390	1.12550	
November 8 2021	273.74037	1.14201	1.13322	1.13401	1.12560	
November 9 2021	273.76513	1.14211	1.13333	1.13411	1.12570	
November 10 2021	273.78990	1.14221	1.13343	1.13421	1.12580	
November 11 2021	273.81467	1.14232	1.13353	1.13431	1.12590	
November 12 2021	273.83943	1.14242	1.13363	1.13442	1.12601	
November 13 2021	273.86420	1.14252	1.13374	1.13452	1.12611	
November 14 2021	273.88897	1.14263	1.13384	1.13462	1.12621	
November 15 2021	273.91373	1.14273	1.13394	1.13472	1.12631	
November 16 2021	273.93850	1.14283	1.13404	1.13483	1.12641	
November 17 2021	273.96327	1.14294	1.13415	1.13493	1.12651	
November 18 2021	273.98803	1.14304	1.13425	1.13503	1.12662	
November 19 2021	274.01280	1.14314	1.13435	1.13513	1.12672	
November 20 2021	274.03757	1.14325	1.13445	1.13524	1.12682	
November 21 2021	274.06233	1.14335	1.13456	1.13534	1.12692	
November 22 2021	274.08710	1.14345	1.13466	1.13544	1.12702	
November 23 2021	274.11187	1.14356	1.13476	1.13554	1.12713	
November 24 2021	274.13663	1.14366	1.13486	1.13565	1.12723	
November 25 2021	274.16140	1.14376	1.13497	1.13575	1.12733	
November 26 2021	274.18617	1.14387	1.13507	1.13585	1.12743	
November 27 2021	274.21093	1.14397	1.13517	1.13595	1.12753	
November 28 2021	274.23570	1.14407	1.13527	1.13606	1.12763	
November 29 2021	274.26047	1.14418	1.13538	1.13616	1.12774	
November 30 2021	274.28523	1.14428	1.13548	1.13626	1.12784	
<b>CPI-U (NSA) for:</b>	<b>July 2021</b>	<b>273.003</b>	<b>August 2021</b>	<b>273.567</b>	<b>September 2021</b>	<b>274.31</b>

**TREASURY INFLATION-PROTECTED SECURITIES (TIPS)**  
**Ref CPI and Index Ratios for**  
**November 2021**

Security: Description: CUSIP Number: Dated Date: Original Issue Date: Additional Issue Date(s):			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	0-5/8% 5-Year TIPS Series X-2023 9128284H0 April 15, 2018 April 30, 2018 August 31, 2018 December 31, 2018
Maturity Date: Ref CPI on Dated Date:			July 15, 2027 244.61839	January 15, 2028 246.66571	February 15, 2048 246.59650	April 15, 2023 248.39153
Date	Ref CPI	Index Ratio	Index Ratio	Index Ratio	Index Ratio	
November 1 2021	273.56700	1.11834	1.10906	1.10937	1.10135	
November 2 2021	273.59177	1.11844	1.10916	1.10947	1.10145	
November 3 2021	273.61653	1.11854	1.10926	1.10957	1.10155	
November 4 2021	273.64130	1.11865	1.10936	1.10967	1.10165	
November 5 2021	273.66607	1.11875	1.10946	1.10977	1.10175	
November 6 2021	273.69083	1.11885	1.10956	1.10987	1.10185	
November 7 2021	273.71560	1.11895	1.10966	1.10997	1.10195	
November 8 2021	273.74037	1.11905	1.10976	1.11007	1.10205	
November 9 2021	273.76513	1.11915	1.10986	1.11017	1.10215	
November 10 2021	273.78990	1.11925	1.10996	1.11027	1.10225	
November 11 2021	273.81467	1.11935	1.11006	1.11038	1.10235	
November 12 2021	273.83943	1.11946	1.11016	1.11048	1.10245	
November 13 2021	273.86420	1.11956	1.11026	1.11058	1.10255	
November 14 2021	273.88897	1.11966	1.11036	1.11068	1.10265	
November 15 2021	273.91373	1.11976	1.11047	1.11078	1.10275	
November 16 2021	273.93850	1.11986	1.11057	1.11088	1.10285	
November 17 2021	273.96327	1.11996	1.11067	1.11098	1.10295	
November 18 2021	273.98803	1.12006	1.11077	1.11108	1.10305	
November 19 2021	274.01280	1.12016	1.11087	1.11118	1.10315	
November 20 2021	274.03757	1.12027	1.11097	1.11128	1.10325	
November 21 2021	274.06233	1.12037	1.11107	1.11138	1.10335	
November 22 2021	274.08710	1.12047	1.11117	1.11148	1.10345	
November 23 2021	274.11187	1.12057	1.11127	1.11158	1.10355	
November 24 2021	274.13663	1.12067	1.11137	1.11168	1.10365	
November 25 2021	274.16140	1.12077	1.11147	1.11178	1.10375	
November 26 2021	274.18617	1.12087	1.11157	1.11188	1.10385	
November 27 2021	274.21093	1.12097	1.11167	1.11198	1.10395	
November 28 2021	274.23570	1.12108	1.11177	1.11208	1.10405	
November 29 2021	274.26047	1.12118	1.11187	1.11218	1.10415	
November 30 2021	274.28523	1.12128	1.11197	1.11228	1.10425	
<b>CPI-U (NSA) for:</b>	<b>July 2021</b>	<b>273.003</b>	<b>August 2021</b>	<b>273.567</b>	<b>September 2021</b>	<b>274.31</b>



**TREASURY INFLATION-PROTECTED SECURITIES (TIPS)**  
**Ref CPI and Index Ratios for**  
**November 2021**

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	0-1/2% 5-Year TIPS Series X-2024 9128286N5 April 15, 2019 April 30, 2019 June 28, 2019
Maturity Date: Ref CPI on Dated Date:			July 15, 2028 251.01658	January 15, 2029 252.50248	February 15, 2049 251.63550	April 15, 2024 252.20853
Date	Ref CPI	Index Ratio	Index Ratio	Index Ratio	Index Ratio	
November 1 2021	273.56700	1.08984	1.08342	1.08716	1.08469	
November 2 2021	273.59177	1.08994	1.08352	1.08725	1.08478	
November 3 2021	273.61653	1.09003	1.08362	1.08735	1.08488	
November 4 2021	273.64130	1.09013	1.08372	1.08745	1.08498	
November 5 2021	273.66607	1.09023	1.08382	1.08755	1.08508	
November 6 2021	273.69083	1.09033	1.08391	1.08765	1.08518	
November 7 2021	273.71560	1.09043	1.08401	1.08775	1.08527	
November 8 2021	273.74037	1.09053	1.08411	1.08784	1.08537	
November 9 2021	273.76513	1.09063	1.08421	1.08794	1.08547	
November 10 2021	273.78990	1.09072	1.08431	1.08804	1.08557	
November 11 2021	273.81467	1.09082	1.08440	1.08814	1.08567	
November 12 2021	273.83943	1.09092	1.08450	1.08824	1.08577	
November 13 2021	273.86420	1.09102	1.08460	1.08834	1.08586	
November 14 2021	273.88897	1.09112	1.08470	1.08844	1.08596	
November 15 2021	273.91373	1.09122	1.08480	1.08853	1.08606	
November 16 2021	273.93850	1.09132	1.08489	1.08863	1.08616	
November 17 2021	273.96327	1.09142	1.08499	1.08873	1.08626	
November 18 2021	273.98803	1.09151	1.08509	1.08883	1.08636	
November 19 2021	274.01280	1.09161	1.08519	1.08893	1.08645	
November 20 2021	274.03757	1.09171	1.08529	1.08903	1.08655	
November 21 2021	274.06233	1.09181	1.08538	1.08912	1.08665	
November 22 2021	274.08710	1.09191	1.08548	1.08922	1.08675	
November 23 2021	274.11187	1.09201	1.08558	1.08932	1.08685	
November 24 2021	274.13663	1.09211	1.08568	1.08942	1.08694	
November 25 2021	274.16140	1.09220	1.08578	1.08952	1.08704	
November 26 2021	274.18617	1.09230	1.08588	1.08962	1.08714	
November 27 2021	274.21093	1.09240	1.08597	1.08971	1.08724	
November 28 2021	274.23570	1.09250	1.08607	1.08981	1.08734	
November 29 2021	274.26047	1.09260	1.08617	1.08991	1.08744	
November 30 2021	274.28523	1.09270	1.08627	1.09001	1.08753	
<b>CPI-U (NSA) for:</b>	<b>July 2021</b>	<b>273.003</b>	<b>August 2021</b>	<b>273.567</b>	<b>September 2021</b>	<b>274.31</b>

**TREASURY INFLATION-PROTECTED SECURITIES (TIPS)**  
**Ref CPI and Index Ratios for**  
**November 2021**

Security: Description: CUSIP Number: Dated Date: Original Issue Date: Additional Issue Date(s):			0-1/4% 10-Year TIPS Series D-2029 9128287D6 July 15, 2019 July 31, 2019 September 30, 2019 November 29, 2019	0-1/8% 5-Year TIPS Series AE-2024 912828YL8 October 15, 2019 October 31, 2019 December 31, 2019	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
Maturity Date: Ref CPI on Dated Date:			July 15, 2029 255.79368	October 15, 2024 256.56513	January 15, 2030 257.28368	February 15, 2050 257.09503
Date	Ref CPI	Index Ratio	Index Ratio	Index Ratio	Index Ratio	
November 1 2021	273.56700	1.06948	1.06627	1.06329	1.06407	
November 2 2021	273.59177	1.06958	1.06636	1.06339	1.06417	
November 3 2021	273.61653	1.06968	1.06646	1.06348	1.06426	
November 4 2021	273.64130	1.06977	1.06656	1.06358	1.06436	
November 5 2021	273.66607	1.06987	1.06665	1.06367	1.06445	
November 6 2021	273.69083	1.06997	1.06675	1.06377	1.06455	
November 7 2021	273.71560	1.07006	1.06685	1.06387	1.06465	
November 8 2021	273.74037	1.07016	1.06694	1.06396	1.06474	
November 9 2021	273.76513	1.07026	1.06704	1.06406	1.06484	
November 10 2021	273.78990	1.07035	1.06714	1.06416	1.06494	
November 11 2021	273.81467	1.07045	1.06723	1.06425	1.06503	
November 12 2021	273.83943	1.07055	1.06733	1.06435	1.06513	
November 13 2021	273.86420	1.07064	1.06743	1.06444	1.06523	
November 14 2021	273.88897	1.07074	1.06752	1.06454	1.06532	
November 15 2021	273.91373	1.07084	1.06762	1.06464	1.06542	
November 16 2021	273.93850	1.07094	1.06772	1.06473	1.06551	
November 17 2021	273.96327	1.07103	1.06781	1.06483	1.06561	
November 18 2021	273.98803	1.07113	1.06791	1.06493	1.06571	
November 19 2021	274.01280	1.07123	1.06800	1.06502	1.06580	
November 20 2021	274.03757	1.07132	1.06810	1.06512	1.06590	
November 21 2021	274.06233	1.07142	1.06820	1.06521	1.06600	
November 22 2021	274.08710	1.07152	1.06829	1.06531	1.06609	
November 23 2021	274.11187	1.07161	1.06839	1.06541	1.06619	
November 24 2021	274.13663	1.07171	1.06849	1.06550	1.06629	
November 25 2021	274.16140	1.07181	1.06858	1.06560	1.06638	
November 26 2021	274.18617	1.07190	1.06868	1.06570	1.06648	
November 27 2021	274.21093	1.07200	1.06878	1.06579	1.06657	
November 28 2021	274.23570	1.07210	1.06887	1.06589	1.06667	
November 29 2021	274.26047	1.07219	1.06897	1.06598	1.06677	
November 30 2021	274.28523	1.07229	1.06907	1.06608	1.06686	
<b>CPI-U (NSA) for:</b>	<b>July 2021</b>	<b>273.003</b>	<b>August 2021</b>	<b>273.567</b>	<b>September 2021</b>	<b>274.31</b>

**TREASURY INFLATION-PROTECTED SECURITIES (TIPS)**  
**Ref CPI and Index Ratios for**  
**November 2021**

Security: Description: CUSIP Number: Dated Date: Original Issue Date: Additional Issue Date(s):			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	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
Maturity Date: Ref CPI on Dated Date:			April 15, 2025 258.30093	July 15, 2030 256.39126	October 15, 2025 259.46997	January 15, 2031 260.31619
Date	Ref CPI	Index Ratio	Index Ratio	Index Ratio	Index Ratio	
November 1 2021	273.56700	1.05910	1.06699	1.05433	1.05090	
November 2 2021	273.59177	1.05920	1.06709	1.05443	1.05100	
November 3 2021	273.61653	1.05929	1.06718	1.05452	1.05109	
November 4 2021	273.64130	1.05939	1.06728	1.05462	1.05119	
November 5 2021	273.66607	1.05949	1.06738	1.05471	1.05128	
November 6 2021	273.69083	1.05958	1.06747	1.05481	1.05138	
November 7 2021	273.71560	1.05968	1.06757	1.05490	1.05147	
November 8 2021	273.74037	1.05977	1.06767	1.05500	1.05157	
November 9 2021	273.76513	1.05987	1.06776	1.05509	1.05166	
November 10 2021	273.78990	1.05996	1.06786	1.05519	1.05176	
November 11 2021	273.81467	1.06006	1.06796	1.05528	1.05185	
November 12 2021	273.83943	1.06016	1.06805	1.05538	1.05195	
November 13 2021	273.86420	1.06025	1.06815	1.05548	1.05204	
November 14 2021	273.88897	1.06035	1.06825	1.05557	1.05214	
November 15 2021	273.91373	1.06044	1.06834	1.05567	1.05223	
November 16 2021	273.93850	1.06054	1.06844	1.05576	1.05233	
November 17 2021	273.96327	1.06064	1.06854	1.05586	1.05243	
November 18 2021	273.98803	1.06073	1.06863	1.05595	1.05252	
November 19 2021	274.01280	1.06083	1.06873	1.05605	1.05262	
November 20 2021	274.03757	1.06092	1.06883	1.05614	1.05271	
November 21 2021	274.06233	1.06102	1.06892	1.05624	1.05281	
November 22 2021	274.08710	1.06112	1.06902	1.05633	1.05290	
November 23 2021	274.11187	1.06121	1.06912	1.05643	1.05300	
November 24 2021	274.13663	1.06131	1.06921	1.05653	1.05309	
November 25 2021	274.16140	1.06140	1.06931	1.05662	1.05319	
November 26 2021	274.18617	1.06150	1.06941	1.05672	1.05328	
November 27 2021	274.21093	1.06159	1.06950	1.05681	1.05338	
November 28 2021	274.23570	1.06169	1.06960	1.05691	1.05347	
November 29 2021	274.26047	1.06179	1.06970	1.05700	1.05357	
November 30 2021	274.28523	1.06188	1.06979	1.05710	1.05366	
<b>CPI-U (NSA) for:</b>	<b>July 2021</b>	<b>273.003</b>	<b>August 2021</b>	<b>273.567</b>	<b>September 2021</b>	<b>274.31</b>

**TREASURY INFLATION-PROTECTED SECURITIES (TIPS)**  
**Ref CPI and Index Ratios for**  
**November 2021**

Security: Description: CUSIP Number: Dated Date: Original Issue Date: Additional Issue Date(s):  Maturity Date: Ref CPI on Dated Date:			0-1/8% 30-Year TIPS TIPS of February 2051 912810SV1 February 15, 2021 February 26, 2021 August 31, 2021  February 15, 2051 260.35150	0-1/8% 5-Year TIPS Series X-2026 91282CCA7 April 15, 2021 April 30, 2021 June 30, 2021  April 15, 2026 262.25027	0-1/8% 10-Year TIPS Series D-2031 91282CCM1 July 15, 2021 July 30, 2021 September 30, 2021  July 15, 2031 268.02090	
Date	Ref CPI	Index Ratio	Index Ratio	Index Ratio		
November 1 2021	273.56700	1.05076	1.04315	1.02069		
November 2 2021	273.59177	1.05086	1.04325	1.02079		
November 3 2021	273.61653	1.05095	1.04334	1.02088		
November 4 2021	273.64130	1.05105	1.04344	1.02097		
November 5 2021	273.66607	1.05114	1.04353	1.02106		
November 6 2021	273.69083	1.05124	1.04362	1.02115		
November 7 2021	273.71560	1.05133	1.04372	1.02125		
November 8 2021	273.74037	1.05143	1.04381	1.02134		
November 9 2021	273.76513	1.05152	1.04391	1.02143		
November 10 2021	273.78990	1.05162	1.04400	1.02152		
November 11 2021	273.81467	1.05171	1.04410	1.02162		
November 12 2021	273.83943	1.05181	1.04419	1.02171		
November 13 2021	273.86420	1.05190	1.04429	1.02180		
November 14 2021	273.88897	1.05200	1.04438	1.02189		
November 15 2021	273.91373	1.05209	1.04447	1.02199		
November 16 2021	273.93850	1.05219	1.04457	1.02208		
November 17 2021	273.96327	1.05228	1.04466	1.02217		
November 18 2021	273.98803	1.05238	1.04476	1.02226		
November 19 2021	274.01280	1.05247	1.04485	1.02236		
November 20 2021	274.03757	1.05257	1.04495	1.02245		
November 21 2021	274.06233	1.05266	1.04504	1.02254		
November 22 2021	274.08710	1.05276	1.04514	1.02263		
November 23 2021	274.11187	1.05285	1.04523	1.02273		
November 24 2021	274.13663	1.05295	1.04532	1.02282		
November 25 2021	274.16140	1.05304	1.04542	1.02291		
November 26 2021	274.18617	1.05314	1.04551	1.02300		
November 27 2021	274.21093	1.05323	1.04561	1.02310		
November 28 2021	274.23570	1.05333	1.04570	1.02319		
November 29 2021	274.26047	1.05342	1.04580	1.02328		
November 30 2021	274.28523	1.05352	1.04589	1.02337		
<b>CPI-U (NSA) for:</b>	<b>July 2021</b>	<b>273.003</b>	<b>August 2021</b>	<b>273.567</b>	<b>September 2021</b>	<b>274.31</b>