

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)
Ref CPI and Index Ratios for
December 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	
December 1 2021	274.31000	1.69599	1.66862	1.54541	1.45525	
December 2 2021	274.38352	1.69645	1.66907	1.54582	1.45564	
December 3 2021	274.45703	1.69690	1.66951	1.54624	1.45603	
December 4 2021	274.53055	1.69736	1.66996	1.54665	1.45642	
December 5 2021	274.60406	1.69781	1.67041	1.54707	1.45681	
December 6 2021	274.67758	1.69827	1.67086	1.54748	1.45720	
December 7 2021	274.75110	1.69872	1.67130	1.54789	1.45759	
December 8 2021	274.82461	1.69918	1.67175	1.54831	1.45798	
December 9 2021	274.89813	1.69963	1.67220	1.54872	1.45837	
December 10 2021	274.97165	1.70008	1.67264	1.54914	1.45876	
December 11 2021	275.04516	1.70054	1.67309	1.54955	1.45915	
December 12 2021	275.11868	1.70099	1.67354	1.54996	1.45954	
December 13 2021	275.19219	1.70145	1.67399	1.55038	1.45993	
December 14 2021	275.26571	1.70190	1.67443	1.55079	1.46032	
December 15 2021	275.33923	1.70236	1.67488	1.55121	1.46071	
December 16 2021	275.41274	1.70281	1.67533	1.55162	1.46110	
December 17 2021	275.48626	1.70327	1.67578	1.55204	1.46149	
December 18 2021	275.55977	1.70372	1.67622	1.55245	1.46188	
December 19 2021	275.63329	1.70418	1.67667	1.55286	1.46227	
December 20 2021	275.70681	1.70463	1.67712	1.55328	1.46266	
December 21 2021	275.78032	1.70508	1.67756	1.55369	1.46305	
December 22 2021	275.85384	1.70554	1.67801	1.55411	1.46344	
December 23 2021	275.92735	1.70599	1.67846	1.55452	1.46383	
December 24 2021	276.00087	1.70645	1.67891	1.55493	1.46422	
December 25 2021	276.07439	1.70690	1.67935	1.55535	1.46461	
December 26 2021	276.14790	1.70736	1.67980	1.55576	1.46500	
December 27 2021	276.22142	1.70781	1.68025	1.55618	1.46539	
December 28 2021	276.29494	1.70827	1.68069	1.55659	1.46578	
December 29 2021	276.36845	1.70872	1.68114	1.55701	1.46617	
December 30 2021	276.44197	1.70918	1.68159	1.55742	1.46656	
December 31 2021	276.51548	1.70963	1.68204	1.55783	1.46695	
CPI-U (NSA) for:			August 2021 273.567	September 2021 274.31	October 2021 276.589	

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)
Ref CPI and Index Ratios for
December 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	
December 1 2021	274.31000	1.38207	1.36023	1.30938	1.27764	
December 2 2021	274.38352	1.38244	1.36059	1.30973	1.27799	
December 3 2021	274.45703	1.38281	1.36096	1.31008	1.27833	
December 4 2021	274.53055	1.38318	1.36132	1.31043	1.27867	
December 5 2021	274.60406	1.38355	1.36169	1.31078	1.27901	
December 6 2021	274.67758	1.38392	1.36205	1.31113	1.27936	
December 7 2021	274.75110	1.38429	1.36242	1.31148	1.27970	
December 8 2021	274.82461	1.38466	1.36278	1.31183	1.28004	
December 9 2021	274.89813	1.38503	1.36315	1.31219	1.28038	
December 10 2021	274.97165	1.38541	1.36351	1.31254	1.28073	
December 11 2021	275.04516	1.38578	1.36387	1.31289	1.28107	
December 12 2021	275.11868	1.38615	1.36424	1.31324	1.28141	
December 13 2021	275.19219	1.38652	1.36460	1.31359	1.28175	
December 14 2021	275.26571	1.38689	1.36497	1.31394	1.28210	
December 15 2021	275.33923	1.38726	1.36533	1.31429	1.28244	
December 16 2021	275.41274	1.38763	1.36570	1.31464	1.28278	
December 17 2021	275.48626	1.38800	1.36606	1.31499	1.28312	
December 18 2021	275.55977	1.38837	1.36643	1.31534	1.28347	
December 19 2021	275.63329	1.38874	1.36679	1.31569	1.28381	
December 20 2021	275.70681	1.38911	1.36716	1.31605	1.28415	
December 21 2021	275.78032	1.38948	1.36752	1.31640	1.28449	
December 22 2021	275.85384	1.38985	1.36788	1.31675	1.28484	
December 23 2021	275.92735	1.39022	1.36825	1.31710	1.28518	
December 24 2021	276.00087	1.39059	1.36861	1.31745	1.28552	
December 25 2021	276.07439	1.39096	1.36898	1.31780	1.28586	
December 26 2021	276.14790	1.39133	1.36934	1.31815	1.28621	
December 27 2021	276.22142	1.39170	1.36971	1.31850	1.28655	
December 28 2021	276.29494	1.39207	1.37007	1.31885	1.28689	
December 29 2021	276.36845	1.39244	1.37044	1.31920	1.28723	
December 30 2021	276.44197	1.39281	1.37080	1.31955	1.28757	
December 31 2021	276.51548	1.39318	1.37117	1.31991	1.28792	
CPI-U (NSA) for:			August 2021 273.567	September 2021 274.31	October 2021 276.589	

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)
Ref CPI and Index Ratios for
December 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	
December 1 2021	274.31000	1.26913	1.25261	1.21197	1.21397	
December 2 2021	274.38352	1.26947	1.25294	1.21229	1.21430	
December 3 2021	274.45703	1.26981	1.25328	1.21262	1.21462	
December 4 2021	274.53055	1.27015	1.25362	1.21294	1.21495	
December 5 2021	274.60406	1.27049	1.25395	1.21327	1.21527	
December 6 2021	274.67758	1.27083	1.25429	1.21359	1.21560	
December 7 2021	274.75110	1.27117	1.25462	1.21391	1.21592	
December 8 2021	274.82461	1.27151	1.25496	1.21424	1.21625	
December 9 2021	274.89813	1.27186	1.25529	1.21456	1.21658	
December 10 2021	274.97165	1.27220	1.25563	1.21489	1.21690	
December 11 2021	275.04516	1.27254	1.25597	1.21521	1.21723	
December 12 2021	275.11868	1.27288	1.25630	1.21554	1.21755	
December 13 2021	275.19219	1.27322	1.25664	1.21586	1.21788	
December 14 2021	275.26571	1.27356	1.25697	1.21619	1.21820	
December 15 2021	275.33923	1.27390	1.25731	1.21651	1.21853	
December 16 2021	275.41274	1.27424	1.25764	1.21684	1.21885	
December 17 2021	275.48626	1.27458	1.25798	1.21716	1.21918	
December 18 2021	275.55977	1.27492	1.25832	1.21749	1.21950	
December 19 2021	275.63329	1.27526	1.25865	1.21781	1.21983	
December 20 2021	275.70681	1.27560	1.25899	1.21814	1.22015	
December 21 2021	275.78032	1.27594	1.25932	1.21846	1.22048	
December 22 2021	275.85384	1.27628	1.25966	1.21879	1.22080	
December 23 2021	275.92735	1.27662	1.25999	1.21911	1.22113	
December 24 2021	276.00087	1.27696	1.26033	1.21944	1.22146	
December 25 2021	276.07439	1.27730	1.26067	1.21976	1.22178	
December 26 2021	276.14790	1.27764	1.26100	1.22009	1.22211	
December 27 2021	276.22142	1.27798	1.26134	1.22041	1.22243	
December 28 2021	276.29494	1.27832	1.26167	1.22074	1.22276	
December 29 2021	276.36845	1.27866	1.26201	1.22106	1.22308	
December 30 2021	276.44197	1.27900	1.26234	1.22139	1.22341	
December 31 2021	276.51548	1.27934	1.26268	1.22171	1.22373	
CPI-U (NSA) for:	August 2021	273.567	September 2021	274.31	October 2021	276.589

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)
Ref CPI and Index Ratios for
December 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	
December 1 2021	274.31000	1.19284	1.18840	1.19311	1.17872	
December 2 2021	274.38352	1.19316	1.18872	1.19343	1.17904	
December 3 2021	274.45703	1.19348	1.18904	1.19375	1.17935	
December 4 2021	274.53055	1.19380	1.18936	1.19407	1.17967	
December 5 2021	274.60406	1.19412	1.18968	1.19439	1.17999	
December 6 2021	274.67758	1.19444	1.19000	1.19471	1.18030	
December 7 2021	274.75110	1.19476	1.19032	1.19503	1.18062	
December 8 2021	274.82461	1.19508	1.19063	1.19535	1.18093	
December 9 2021	274.89813	1.19540	1.19095	1.19567	1.18125	
December 10 2021	274.97165	1.19572	1.19127	1.19599	1.18157	
December 11 2021	275.04516	1.19604	1.19159	1.19631	1.18188	
December 12 2021	275.11868	1.19636	1.19191	1.19663	1.18220	
December 13 2021	275.19219	1.19668	1.19223	1.19695	1.18251	
December 14 2021	275.26571	1.19700	1.19255	1.19727	1.18283	
December 15 2021	275.33923	1.19732	1.19286	1.19759	1.18315	
December 16 2021	275.41274	1.19764	1.19318	1.19791	1.18346	
December 17 2021	275.48626	1.19796	1.19350	1.19823	1.18378	
December 18 2021	275.55977	1.19828	1.19382	1.19855	1.18409	
December 19 2021	275.63329	1.19860	1.19414	1.19887	1.18441	
December 20 2021	275.70681	1.19892	1.19446	1.19919	1.18473	
December 21 2021	275.78032	1.19924	1.19477	1.19951	1.18504	
December 22 2021	275.85384	1.19956	1.19509	1.19983	1.18536	
December 23 2021	275.92735	1.19988	1.19541	1.20015	1.18567	
December 24 2021	276.00087	1.20020	1.19573	1.20047	1.18599	
December 25 2021	276.07439	1.20052	1.19605	1.20079	1.18630	
December 26 2021	276.14790	1.20084	1.19637	1.20111	1.18662	
December 27 2021	276.22142	1.20116	1.19669	1.20143	1.18694	
December 28 2021	276.29494	1.20148	1.19700	1.20175	1.18725	
December 29 2021	276.36845	1.20179	1.19732	1.20207	1.18757	
December 30 2021	276.44197	1.20211	1.19764	1.20239	1.18788	
December 31 2021	276.51548	1.20243	1.19796	1.20271	1.18820	
CPI-U (NSA) for:	August 2021	273.567	September 2021	274.31	October 2021	276.589

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)
Ref CPI and Index Ratios for
December 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	
December 1 2021	274.31000	1.17563	1.17700	1.15525	1.15814	
December 2 2021	274.38352	1.17594	1.17731	1.15556	1.15845	
December 3 2021	274.45703	1.17626	1.17763	1.15587	1.15876	
December 4 2021	274.53055	1.17657	1.17794	1.15618	1.15907	
December 5 2021	274.60406	1.17689	1.17826	1.15649	1.15938	
December 6 2021	274.67758	1.17720	1.17858	1.15680	1.15969	
December 7 2021	274.75110	1.17752	1.17889	1.15711	1.16000	
December 8 2021	274.82461	1.17783	1.17921	1.15742	1.16031	
December 9 2021	274.89813	1.17815	1.17952	1.15773	1.16062	
December 10 2021	274.97165	1.17846	1.17984	1.15804	1.16093	
December 11 2021	275.04516	1.17878	1.18015	1.15835	1.16124	
December 12 2021	275.11868	1.17909	1.18047	1.15866	1.16155	
December 13 2021	275.19219	1.17941	1.18078	1.15897	1.16186	
December 14 2021	275.26571	1.17972	1.18110	1.15928	1.16217	
December 15 2021	275.33923	1.18004	1.18141	1.15959	1.16248	
December 16 2021	275.41274	1.18035	1.18173	1.15990	1.16280	
December 17 2021	275.48626	1.18067	1.18205	1.16021	1.16311	
December 18 2021	275.55977	1.18098	1.18236	1.16052	1.16342	
December 19 2021	275.63329	1.18130	1.18268	1.16083	1.16373	
December 20 2021	275.70681	1.18161	1.18299	1.16114	1.16404	
December 21 2021	275.78032	1.18193	1.18331	1.16144	1.16435	
December 22 2021	275.85384	1.18224	1.18362	1.16175	1.16466	
December 23 2021	275.92735	1.18256	1.18394	1.16206	1.16497	
December 24 2021	276.00087	1.18287	1.18425	1.16237	1.16528	
December 25 2021	276.07439	1.18319	1.18457	1.16268	1.16559	
December 26 2021	276.14790	1.18350	1.18488	1.16299	1.16590	
December 27 2021	276.22142	1.18382	1.18520	1.16330	1.16621	
December 28 2021	276.29494	1.18414	1.18551	1.16361	1.16652	
December 29 2021	276.36845	1.18445	1.18583	1.16392	1.16683	
December 30 2021	276.44197	1.18477	1.18615	1.16423	1.16714	
December 31 2021	276.51548	1.18508	1.18646	1.16454	1.16745	
CPI-U (NSA) for:	August 2021	273.567	September 2021	274.31	October 2021	276.589

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)
Ref CPI and Index Ratios for
December 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	
December 1 2021	274.31000	1.16489	1.15673	1.15445	1.15770	
December 2 2021	274.38352	1.16520	1.15704	1.15476	1.15801	
December 3 2021	274.45703	1.16551	1.15735	1.15507	1.15832	
December 4 2021	274.53055	1.16583	1.15766	1.15538	1.15863	
December 5 2021	274.60406	1.16614	1.15797	1.15569	1.15894	
December 6 2021	274.67758	1.16645	1.15828	1.15600	1.15925	
December 7 2021	274.75110	1.16676	1.15859	1.15630	1.15956	
December 8 2021	274.82461	1.16708	1.15890	1.15661	1.15987	
December 9 2021	274.89813	1.16739	1.15921	1.15692	1.16018	
December 10 2021	274.97165	1.16770	1.15952	1.15723	1.16049	
December 11 2021	275.04516	1.16801	1.15983	1.15754	1.16080	
December 12 2021	275.11868	1.16832	1.16014	1.15785	1.16111	
December 13 2021	275.19219	1.16864	1.16045	1.15816	1.16142	
December 14 2021	275.26571	1.16895	1.16076	1.15847	1.16173	
December 15 2021	275.33923	1.16926	1.16107	1.15878	1.16204	
December 16 2021	275.41274	1.16957	1.16138	1.15909	1.16235	
December 17 2021	275.48626	1.16988	1.16169	1.15940	1.16266	
December 18 2021	275.55977	1.17020	1.16200	1.15971	1.16297	
December 19 2021	275.63329	1.17051	1.16231	1.16002	1.16328	
December 20 2021	275.70681	1.17082	1.16262	1.16033	1.16359	
December 21 2021	275.78032	1.17113	1.16293	1.16064	1.16390	
December 22 2021	275.85384	1.17145	1.16324	1.16095	1.16421	
December 23 2021	275.92735	1.17176	1.16355	1.16126	1.16452	
December 24 2021	276.00087	1.17207	1.16386	1.16156	1.16483	
December 25 2021	276.07439	1.17238	1.16417	1.16187	1.16514	
December 26 2021	276.14790	1.17269	1.16448	1.16218	1.16545	
December 27 2021	276.22142	1.17301	1.16479	1.16249	1.16576	
December 28 2021	276.29494	1.17332	1.16510	1.16280	1.16607	
December 29 2021	276.36845	1.17363	1.16541	1.16311	1.16638	
December 30 2021	276.44197	1.17394	1.16572	1.16342	1.16670	
December 31 2021	276.51548	1.17426	1.16603	1.16373	1.16701	
CPI-U (NSA) for:	August 2021	273.567	September 2021	274.31	October 2021	276.589

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)
Ref CPI and Index Ratios for
December 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	
December 1 2021	274.31000	1.14438	1.13558	1.13637	1.12794	
December 2 2021	274.38352	1.14469	1.13589	1.13667	1.12824	
December 3 2021	274.45703	1.14500	1.13619	1.13697	1.12854	
December 4 2021	274.53055	1.14530	1.13649	1.13728	1.12885	
December 5 2021	274.60406	1.14561	1.13680	1.13758	1.12915	
December 6 2021	274.67758	1.14592	1.13710	1.13789	1.12945	
December 7 2021	274.75110	1.14622	1.13741	1.13819	1.12975	
December 8 2021	274.82461	1.14653	1.13771	1.13850	1.13006	
December 9 2021	274.89813	1.14684	1.13802	1.13880	1.13036	
December 10 2021	274.97165	1.14714	1.13832	1.13911	1.13066	
December 11 2021	275.04516	1.14745	1.13862	1.13941	1.13096	
December 12 2021	275.11868	1.14776	1.13893	1.13972	1.13127	
December 13 2021	275.19219	1.14806	1.13923	1.14002	1.13157	
December 14 2021	275.26571	1.14837	1.13954	1.14032	1.13187	
December 15 2021	275.33923	1.14868	1.13984	1.14063	1.13217	
December 16 2021	275.41274	1.14898	1.14015	1.14093	1.13247	
December 17 2021	275.48626	1.14929	1.14045	1.14124	1.13278	
December 18 2021	275.55977	1.14960	1.14075	1.14154	1.13308	
December 19 2021	275.63329	1.14990	1.14106	1.14185	1.13338	
December 20 2021	275.70681	1.15021	1.14136	1.14215	1.13368	
December 21 2021	275.78032	1.15052	1.14167	1.14246	1.13399	
December 22 2021	275.85384	1.15082	1.14197	1.14276	1.13429	
December 23 2021	275.92735	1.15113	1.14228	1.14307	1.13459	
December 24 2021	276.00087	1.15144	1.14258	1.14337	1.13489	
December 25 2021	276.07439	1.15174	1.14289	1.14367	1.13520	
December 26 2021	276.14790	1.15205	1.14319	1.14398	1.13550	
December 27 2021	276.22142	1.15236	1.14349	1.14428	1.13580	
December 28 2021	276.29494	1.15266	1.14380	1.14459	1.13610	
December 29 2021	276.36845	1.15297	1.14410	1.14489	1.13640	
December 30 2021	276.44197	1.15328	1.14441	1.14520	1.13671	
December 31 2021	276.51548	1.15358	1.14471	1.14550	1.13701	
CPI-U (NSA) for:	August 2021	273.567	September 2021	274.31	October 2021	276.589

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)
Ref CPI and Index Ratios for
December 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	
December 1 2021	274.31000	1.12138	1.11207	1.11238	1.10435	
December 2 2021	274.38352	1.12168	1.11237	1.11268	1.10464	
December 3 2021	274.45703	1.12198	1.11267	1.11298	1.10494	
December 4 2021	274.53055	1.12228	1.11297	1.11328	1.10523	
December 5 2021	274.60406	1.12258	1.11326	1.11358	1.10553	
December 6 2021	274.67758	1.12288	1.11356	1.11387	1.10583	
December 7 2021	274.75110	1.12318	1.11386	1.11417	1.10612	
December 8 2021	274.82461	1.12348	1.11416	1.11447	1.10642	
December 9 2021	274.89813	1.12378	1.11446	1.11477	1.10671	
December 10 2021	274.97165	1.12408	1.11475	1.11507	1.10701	
December 11 2021	275.04516	1.12438	1.11505	1.11537	1.10730	
December 12 2021	275.11868	1.12469	1.11535	1.11566	1.10760	
December 13 2021	275.19219	1.12499	1.11565	1.11596	1.10790	
December 14 2021	275.26571	1.12529	1.11595	1.11626	1.10819	
December 15 2021	275.33923	1.12559	1.11624	1.11656	1.10849	
December 16 2021	275.41274	1.12589	1.11654	1.11686	1.10878	
December 17 2021	275.48626	1.12619	1.11684	1.11715	1.10908	
December 18 2021	275.55977	1.12649	1.11714	1.11745	1.10938	
December 19 2021	275.63329	1.12679	1.11744	1.11775	1.10967	
December 20 2021	275.70681	1.12709	1.11773	1.11805	1.10997	
December 21 2021	275.78032	1.12739	1.11803	1.11835	1.11026	
December 22 2021	275.85384	1.12769	1.11833	1.11864	1.11056	
December 23 2021	275.92735	1.12799	1.11863	1.11894	1.11086	
December 24 2021	276.00087	1.12829	1.11893	1.11924	1.11115	
December 25 2021	276.07439	1.12859	1.11922	1.11954	1.11145	
December 26 2021	276.14790	1.12889	1.11952	1.11984	1.11174	
December 27 2021	276.22142	1.12919	1.11982	1.12014	1.11204	
December 28 2021	276.29494	1.12949	1.12012	1.12043	1.11234	
December 29 2021	276.36845	1.12979	1.12042	1.12073	1.11263	
December 30 2021	276.44197	1.13009	1.12072	1.12103	1.11293	
December 31 2021	276.51548	1.13040	1.12101	1.12133	1.11322	
CPI-U (NSA) for:	August 2021	273.567	September 2021	274.31	October 2021	276.589

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)
Ref CPI and Index Ratios for
December 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	
December 1 2021	274.31000	1.09280	1.08637	1.09011	1.08763	
December 2 2021	274.38352	1.09309	1.08666	1.09040	1.08792	
December 3 2021	274.45703	1.09338	1.08695	1.09069	1.08821	
December 4 2021	274.53055	1.09367	1.08724	1.09098	1.08851	
December 5 2021	274.60406	1.09397	1.08753	1.09128	1.08880	
December 6 2021	274.67758	1.09426	1.08782	1.09157	1.08909	
December 7 2021	274.75110	1.09455	1.08811	1.09186	1.08938	
December 8 2021	274.82461	1.09485	1.08840	1.09215	1.08967	
December 9 2021	274.89813	1.09514	1.08869	1.09245	1.08996	
December 10 2021	274.97165	1.09543	1.08899	1.09274	1.09026	
December 11 2021	275.04516	1.09573	1.08928	1.09303	1.09055	
December 12 2021	275.11868	1.09602	1.08957	1.09332	1.09084	
December 13 2021	275.19219	1.09631	1.08986	1.09361	1.09113	
December 14 2021	275.26571	1.09660	1.09015	1.09391	1.09142	
December 15 2021	275.33923	1.09690	1.09044	1.09420	1.09171	
December 16 2021	275.41274	1.09719	1.09073	1.09449	1.09200	
December 17 2021	275.48626	1.09748	1.09102	1.09478	1.09230	
December 18 2021	275.55977	1.09778	1.09132	1.09508	1.09259	
December 19 2021	275.63329	1.09807	1.09161	1.09537	1.09288	
December 20 2021	275.70681	1.09836	1.09190	1.09566	1.09317	
December 21 2021	275.78032	1.09865	1.09219	1.09595	1.09346	
December 22 2021	275.85384	1.09895	1.09248	1.09624	1.09375	
December 23 2021	275.92735	1.09924	1.09277	1.09654	1.09404	
December 24 2021	276.00087	1.09953	1.09306	1.09683	1.09434	
December 25 2021	276.07439	1.09983	1.09335	1.09712	1.09463	
December 26 2021	276.14790	1.10012	1.09364	1.09741	1.09492	
December 27 2021	276.22142	1.10041	1.09394	1.09770	1.09521	
December 28 2021	276.29494	1.10070	1.09423	1.09800	1.09550	
December 29 2021	276.36845	1.10100	1.09452	1.09829	1.09579	
December 30 2021	276.44197	1.10129	1.09481	1.09858	1.09608	
December 31 2021	276.51548	1.10158	1.09510	1.09887	1.09638	
CPI-U (NSA) for:	August 2021	273.567	September 2021	274.31	October 2021	276.589

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)
Ref CPI and Index Ratios for
December 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	
December 1 2021	274.31000	1.07239	1.06916	1.06618	1.06696	
December 2 2021	274.38352	1.07268	1.06945	1.06646	1.06725	
December 3 2021	274.45703	1.07296	1.06974	1.06675	1.06753	
December 4 2021	274.53055	1.07325	1.07002	1.06703	1.06782	
December 5 2021	274.60406	1.07354	1.07031	1.06732	1.06810	
December 6 2021	274.67758	1.07382	1.07060	1.06761	1.06839	
December 7 2021	274.75110	1.07411	1.07088	1.06789	1.06868	
December 8 2021	274.82461	1.07440	1.07117	1.06818	1.06896	
December 9 2021	274.89813	1.07469	1.07146	1.06846	1.06925	
December 10 2021	274.97165	1.07497	1.07174	1.06875	1.06953	
December 11 2021	275.04516	1.07526	1.07203	1.06903	1.06982	
December 12 2021	275.11868	1.07555	1.07232	1.06932	1.07011	
December 13 2021	275.19219	1.07584	1.07260	1.06961	1.07039	
December 14 2021	275.26571	1.07612	1.07289	1.06989	1.07068	
December 15 2021	275.33923	1.07641	1.07317	1.07018	1.07096	
December 16 2021	275.41274	1.07670	1.07346	1.07046	1.07125	
December 17 2021	275.48626	1.07699	1.07375	1.07075	1.07153	
December 18 2021	275.55977	1.07727	1.07403	1.07103	1.07182	
December 19 2021	275.63329	1.07756	1.07432	1.07132	1.07211	
December 20 2021	275.70681	1.07785	1.07461	1.07161	1.07239	
December 21 2021	275.78032	1.07814	1.07489	1.07189	1.07268	
December 22 2021	275.85384	1.07842	1.07518	1.07218	1.07296	
December 23 2021	275.92735	1.07871	1.07547	1.07246	1.07325	
December 24 2021	276.00087	1.07900	1.07575	1.07275	1.07354	
December 25 2021	276.07439	1.07929	1.07604	1.07303	1.07382	
December 26 2021	276.14790	1.07957	1.07633	1.07332	1.07411	
December 27 2021	276.22142	1.07986	1.07661	1.07361	1.07439	
December 28 2021	276.29494	1.08015	1.07690	1.07389	1.07468	
December 29 2021	276.36845	1.08044	1.07719	1.07418	1.07497	
December 30 2021	276.44197	1.08072	1.07747	1.07446	1.07525	
December 31 2021	276.51548	1.08101	1.07776	1.07475	1.07554	
CPI-U (NSA) for:			August 2021 273.567	September 2021 274.31	October 2021 276.589	

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)
Ref CPI and Index Ratios for
December 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	
December 1 2021	274.31000	1.06198	1.06989	1.05719	1.05376	
December 2 2021	274.38352	1.06226	1.07018	1.05748	1.05404	
December 3 2021	274.45703	1.06255	1.07046	1.05776	1.05432	
December 4 2021	274.53055	1.06283	1.07075	1.05804	1.05460	
December 5 2021	274.60406	1.06312	1.07104	1.05833	1.05489	
December 6 2021	274.67758	1.06340	1.07132	1.05861	1.05517	
December 7 2021	274.75110	1.06369	1.07161	1.05889	1.05545	
December 8 2021	274.82461	1.06397	1.07190	1.05918	1.05573	
December 9 2021	274.89813	1.06426	1.07218	1.05946	1.05602	
December 10 2021	274.97165	1.06454	1.07247	1.05974	1.05630	
December 11 2021	275.04516	1.06482	1.07276	1.06003	1.05658	
December 12 2021	275.11868	1.06511	1.07304	1.06031	1.05686	
December 13 2021	275.19219	1.06539	1.07333	1.06059	1.05715	
December 14 2021	275.26571	1.06568	1.07362	1.06088	1.05743	
December 15 2021	275.33923	1.06596	1.07390	1.06116	1.05771	
December 16 2021	275.41274	1.06625	1.07419	1.06144	1.05799	
December 17 2021	275.48626	1.06653	1.07448	1.06173	1.05828	
December 18 2021	275.55977	1.06682	1.07476	1.06201	1.05856	
December 19 2021	275.63329	1.06710	1.07505	1.06229	1.05884	
December 20 2021	275.70681	1.06739	1.07534	1.06258	1.05912	
December 21 2021	275.78032	1.06767	1.07562	1.06286	1.05941	
December 22 2021	275.85384	1.06796	1.07591	1.06314	1.05969	
December 23 2021	275.92735	1.06824	1.07620	1.06343	1.05997	
December 24 2021	276.00087	1.06852	1.07648	1.06371	1.06025	
December 25 2021	276.07439	1.06881	1.07677	1.06399	1.06053	
December 26 2021	276.14790	1.06909	1.07706	1.06428	1.06082	
December 27 2021	276.22142	1.06938	1.07734	1.06456	1.06110	
December 28 2021	276.29494	1.06966	1.07763	1.06484	1.06138	
December 29 2021	276.36845	1.06995	1.07792	1.06513	1.06166	
December 30 2021	276.44197	1.07023	1.07820	1.06541	1.06195	
December 31 2021	276.51548	1.07052	1.07849	1.06569	1.06223	
CPI-U (NSA) for:	August 2021	273.567	September 2021	274.31	October 2021	276.589

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

Security: Description: CUSIP Number: Dated Date: Original Issue Date: Additional Issue Date(s):			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	0-1/8% 10-Year TIPS Series D-2031 91282CCM1 July 15, 2021 July 30, 2021 September 30, 2021	0-1/8% 5-Year TIPS Series AE-2026 91282CDC2 October 15, 2021 October 29, 2021
Maturity Date: Ref CPI on Dated Date:			February 15, 2051 260.35150	April 15, 2026 262.25027	July 15, 2031 268.02090	October 15, 2026 273.25771
Date	Ref CPI	Index Ratio	Index Ratio	Index Ratio	Index Ratio	
December 1 2021	274.31000	1.05361	1.04599	1.02346	1.00385	
December 2 2021	274.38352	1.05390	1.04627	1.02374	1.00412	
December 3 2021	274.45703	1.05418	1.04655	1.02401	1.00439	
December 4 2021	274.53055	1.05446	1.04683	1.02429	1.00466	
December 5 2021	274.60406	1.05474	1.04711	1.02456	1.00493	
December 6 2021	274.67758	1.05503	1.04739	1.02484	1.00520	
December 7 2021	274.75110	1.05531	1.04767	1.02511	1.00547	
December 8 2021	274.82461	1.05559	1.04795	1.02538	1.00573	
December 9 2021	274.89813	1.05587	1.04823	1.02566	1.00600	
December 10 2021	274.97165	1.05616	1.04851	1.02593	1.00627	
December 11 2021	275.04516	1.05644	1.04879	1.02621	1.00654	
December 12 2021	275.11868	1.05672	1.04907	1.02648	1.00681	
December 13 2021	275.19219	1.05700	1.04935	1.02676	1.00708	
December 14 2021	275.26571	1.05728	1.04963	1.02703	1.00735	
December 15 2021	275.33923	1.05757	1.04991	1.02731	1.00762	
December 16 2021	275.41274	1.05785	1.05019	1.02758	1.00789	
December 17 2021	275.48626	1.05813	1.05047	1.02785	1.00816	
December 18 2021	275.55977	1.05841	1.05075	1.02813	1.00842	
December 19 2021	275.63329	1.05870	1.05103	1.02840	1.00869	
December 20 2021	275.70681	1.05898	1.05131	1.02868	1.00896	
December 21 2021	275.78032	1.05926	1.05159	1.02895	1.00923	
December 22 2021	275.85384	1.05954	1.05187	1.02923	1.00950	
December 23 2021	275.92735	1.05983	1.05215	1.02950	1.00977	
December 24 2021	276.00087	1.06011	1.05243	1.02977	1.01004	
December 25 2021	276.07439	1.06039	1.05271	1.03005	1.01031	
December 26 2021	276.14790	1.06067	1.05299	1.03032	1.01058	
December 27 2021	276.22142	1.06096	1.05327	1.03060	1.01085	
December 28 2021	276.29494	1.06124	1.05355	1.03087	1.01111	
December 29 2021	276.36845	1.06152	1.05383	1.03115	1.01138	
December 30 2021	276.44197	1.06180	1.05412	1.03142	1.01165	
December 31 2021	276.51548	1.06209	1.05440	1.03169	1.01192	
CPI-U (NSA) for:			August 2021	September 2021	October 2021	
			273.567	274.31	276.589	