

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)
Ref CPI and Index Ratios for
February 2019

| 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 | |
| February 1 2019 | 252.03800 | 1.55829 | 1.53314 | 1.41993 | 1.33709 | |
| February 2 2019 | 252.00925 | 1.55811 | 1.53297 | 1.41977 | 1.33694 | |
| February 3 2019 | 251.98050 | 1.55794 | 1.53279 | 1.41961 | 1.33679 | |
| February 4 2019 | 251.95175 | 1.55776 | 1.53262 | 1.41945 | 1.33664 | |
| February 5 2019 | 251.92300 | 1.55758 | 1.53244 | 1.41928 | 1.33648 | |
| February 6 2019 | 251.89425 | 1.55740 | 1.53227 | 1.41912 | 1.33633 | |
| February 7 2019 | 251.86550 | 1.55722 | 1.53209 | 1.41896 | 1.33618 | |
| February 8 2019 | 251.83675 | 1.55705 | 1.53192 | 1.41880 | 1.33603 | |
| February 9 2019 | 251.80800 | 1.55687 | 1.53174 | 1.41864 | 1.33587 | |
| February 10 2019 | 251.77925 | 1.55669 | 1.53157 | 1.41847 | 1.33572 | |
| February 11 2019 | 251.75050 | 1.55651 | 1.53139 | 1.41831 | 1.33557 | |
| February 12 2019 | 251.72175 | 1.55634 | 1.53122 | 1.41815 | 1.33542 | |
| February 13 2019 | 251.69300 | 1.55616 | 1.53104 | 1.41799 | 1.33526 | |
| February 14 2019 | 251.66425 | 1.55598 | 1.53087 | 1.41783 | 1.33511 | |
| February 15 2019 | 251.63550 | 1.55580 | 1.53069 | 1.41766 | 1.33496 | |
| February 16 2019 | 251.60675 | 1.55562 | 1.53052 | 1.41750 | 1.33481 | |
| February 17 2019 | 251.57800 | 1.55545 | 1.53034 | 1.41734 | 1.33465 | |
| February 18 2019 | 251.54925 | 1.55527 | 1.53017 | 1.41718 | 1.33450 | |
| February 19 2019 | 251.52050 | 1.55509 | 1.52999 | 1.41702 | 1.33435 | |
| February 20 2019 | 251.49175 | 1.55491 | 1.52982 | 1.41685 | 1.33420 | |
| February 21 2019 | 251.46300 | 1.55474 | 1.52964 | 1.41669 | 1.33404 | |
| February 22 2019 | 251.43425 | 1.55456 | 1.52947 | 1.41653 | 1.33389 | |
| February 23 2019 | 251.40550 | 1.55438 | 1.52929 | 1.41637 | 1.33374 | |
| February 24 2019 | 251.37675 | 1.55420 | 1.52912 | 1.41621 | 1.33359 | |
| February 25 2019 | 251.34800 | 1.55402 | 1.52894 | 1.41605 | 1.33343 | |
| February 26 2019 | 251.31925 | 1.55385 | 1.52877 | 1.41588 | 1.33328 | |
| February 27 2019 | 251.29050 | 1.55367 | 1.52859 | 1.41572 | 1.33313 | |
| February 28 2019 | 251.26175 | 1.55349 | 1.52842 | 1.41556 | 1.33298 | |
| CPI-U (NSA) for: | | | October 2018 252.885 | November 2018 252.038 | December 2018 251.233 | |

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)
Ref CPI and Index Ratios for
February 2019

| Security: | | | 2% 20-Year TIPS | 2-3/8% 20-Year TIPS | 1-3/4% 20-Year TIPS | 2-1/2% 20-Year TIPS |
|----------------------------------|----------------|--------------------|-----------------------------|------------------------------|------------------------------|-----------------------------|
| Description: | | | TIPS of January 2026 | TIPS of January 2027 | TIPS of January 2028 | TIPS of January 2029 |
| CUSIP Number: | | | 912810FS2 | 912810PS1 | 912810PV4 | 912810PZ5 |
| Dated Date: | | | January 15, 2006 | January 15, 2007 | January 15, 2008 | January 15, 2009 |
| Original Issue Date: | | | January 31, 2006 | January 31, 2007 | January 31, 2008 | January 30, 2009 |
| Additional Issue Date(s): | | | July 31, 2006 | July 31, 2007 | July 31, 2008 | July 31, 2009 |
| Maturity Date: | | | January 15, 2026 | January 15, 2027 | January 15, 2028 | January 15, 2029 |
| Ref CPI on Dated Date: | | | 198.47742 | 201.66452 | 209.49645 | 214.69971 |
| Date | Ref CPI | Index Ratio | Index Ratio | Index Ratio | Index Ratio | |
| February 1 2019 | 252.03800 | 1.26986 | 1.24979 | 1.20307 | 1.17391 | |
| February 2 2019 | 252.00925 | 1.26971 | 1.24965 | 1.20293 | 1.17378 | |
| February 3 2019 | 251.98050 | 1.26957 | 1.24950 | 1.20279 | 1.17364 | |
| February 4 2019 | 251.95175 | 1.26942 | 1.24936 | 1.20265 | 1.17351 | |
| February 5 2019 | 251.92300 | 1.26928 | 1.24922 | 1.20252 | 1.17337 | |
| February 6 2019 | 251.89425 | 1.26913 | 1.24908 | 1.20238 | 1.17324 | |
| February 7 2019 | 251.86550 | 1.26899 | 1.24893 | 1.20224 | 1.17311 | |
| February 8 2019 | 251.83675 | 1.26884 | 1.24879 | 1.20211 | 1.17297 | |
| February 9 2019 | 251.80800 | 1.26870 | 1.24865 | 1.20197 | 1.17284 | |
| February 10 2019 | 251.77925 | 1.26855 | 1.24851 | 1.20183 | 1.17270 | |
| February 11 2019 | 251.75050 | 1.26841 | 1.24836 | 1.20169 | 1.17257 | |
| February 12 2019 | 251.72175 | 1.26826 | 1.24822 | 1.20156 | 1.17244 | |
| February 13 2019 | 251.69300 | 1.26812 | 1.24808 | 1.20142 | 1.17230 | |
| February 14 2019 | 251.66425 | 1.26797 | 1.24794 | 1.20128 | 1.17217 | |
| February 15 2019 | 251.63550 | 1.26783 | 1.24779 | 1.20114 | 1.17203 | |
| February 16 2019 | 251.60675 | 1.26768 | 1.24765 | 1.20101 | 1.17190 | |
| February 17 2019 | 251.57800 | 1.26754 | 1.24751 | 1.20087 | 1.17177 | |
| February 18 2019 | 251.54925 | 1.26739 | 1.24736 | 1.20073 | 1.17163 | |
| February 19 2019 | 251.52050 | 1.26725 | 1.24722 | 1.20060 | 1.17150 | |
| February 20 2019 | 251.49175 | 1.26711 | 1.24708 | 1.20046 | 1.17137 | |
| February 21 2019 | 251.46300 | 1.26696 | 1.24694 | 1.20032 | 1.17123 | |
| February 22 2019 | 251.43425 | 1.26682 | 1.24679 | 1.20018 | 1.17110 | |
| February 23 2019 | 251.40550 | 1.26667 | 1.24665 | 1.20005 | 1.17096 | |
| February 24 2019 | 251.37675 | 1.26653 | 1.24651 | 1.19991 | 1.17083 | |
| February 25 2019 | 251.34800 | 1.26638 | 1.24637 | 1.19977 | 1.17070 | |
| February 26 2019 | 251.31925 | 1.26624 | 1.24622 | 1.19963 | 1.17056 | |
| February 27 2019 | 251.29050 | 1.26609 | 1.24608 | 1.19950 | 1.17043 | |
| February 28 2019 | 251.26175 | 1.26595 | 1.24594 | 1.19936 | 1.17029 | |
| CPI-U (NSA) for: | | | October 2018 252.885 | November 2018 252.038 | December 2018 251.233 | |

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)
Ref CPI and Index Ratios for
February 2019

| Date | | | Ref CPI | Index Ratio | Index Ratio | Index Ratio | Index Ratio | |
|-------------------------|----|------|---------------------|----------------|----------------------|----------------|----------------------|----------------|
| February | 1 | 2019 | 252.03800 | 1.18041 | 1.16551 | 1.16609 | 1.15569 | |
| February | 2 | 2019 | 252.00925 | 1.18027 | 1.16538 | 1.16596 | 1.15555 | |
| February | 3 | 2019 | 251.98050 | 1.18014 | 1.16525 | 1.16582 | 1.15542 | |
| February | 4 | 2019 | 251.95175 | 1.18000 | 1.16512 | 1.16569 | 1.15529 | |
| February | 5 | 2019 | 251.92300 | 1.17987 | 1.16498 | 1.16556 | 1.15516 | |
| February | 6 | 2019 | 251.89425 | 1.17973 | 1.16485 | 1.16542 | 1.15503 | |
| February | 7 | 2019 | 251.86550 | 1.17960 | 1.16472 | 1.16529 | 1.15489 | |
| February | 8 | 2019 | 251.83675 | 1.17946 | 1.16458 | 1.16516 | 1.15476 | |
| February | 9 | 2019 | 251.80800 | 1.17933 | 1.16445 | 1.16503 | 1.15463 | |
| February | 10 | 2019 | 251.77925 | 1.17919 | 1.16432 | 1.16489 | 1.15450 | |
| February | 11 | 2019 | 251.75050 | 1.17906 | 1.16419 | 1.16476 | 1.15437 | |
| February | 12 | 2019 | 251.72175 | 1.17892 | 1.16405 | 1.16463 | 1.15424 | |
| February | 13 | 2019 | 251.69300 | 1.17879 | 1.16392 | 1.16449 | 1.15410 | |
| February | 14 | 2019 | 251.66425 | 1.17865 | 1.16379 | 1.16436 | 1.15397 | |
| February | 15 | 2019 | 251.63550 | 1.17852 | 1.16365 | 1.16423 | 1.15384 | |
| February | 16 | 2019 | 251.60675 | 1.17839 | 1.16352 | 1.16409 | 1.15371 | |
| February | 17 | 2019 | 251.57800 | 1.17825 | 1.16339 | 1.16396 | 1.15358 | |
| February | 18 | 2019 | 251.54925 | 1.17812 | 1.16325 | 1.16383 | 1.15344 | |
| February | 19 | 2019 | 251.52050 | 1.17798 | 1.16312 | 1.16370 | 1.15331 | |
| February | 20 | 2019 | 251.49175 | 1.17785 | 1.16299 | 1.16356 | 1.15318 | |
| February | 21 | 2019 | 251.46300 | 1.17771 | 1.16286 | 1.16343 | 1.15305 | |
| February | 22 | 2019 | 251.43425 | 1.17758 | 1.16272 | 1.16330 | 1.15292 | |
| February | 23 | 2019 | 251.40550 | 1.17744 | 1.16259 | 1.16316 | 1.15279 | |
| February | 24 | 2019 | 251.37675 | 1.17731 | 1.16246 | 1.16303 | 1.15265 | |
| February | 25 | 2019 | 251.34800 | 1.17717 | 1.16232 | 1.16290 | 1.15252 | |
| February | 26 | 2019 | 251.31925 | 1.17704 | 1.16219 | 1.16276 | 1.15239 | |
| February | 27 | 2019 | 251.29050 | 1.17690 | 1.16206 | 1.16263 | 1.15226 | |
| February | 28 | 2019 | 251.26175 | 1.17677 | 1.16193 | 1.16250 | 1.15213 | |
| CPI-U (NSA) for: | | | October 2018 | 252.885 | November 2018 | 252.038 | December 2018 | 251.233 |

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|----------------------------------|----------------------------|----------------------------|------------------------------|----------------------------|
| Security: | 1-7/8% 10-Year TIPS | 1-3/8% 10-Year TIPS | 2-1/8% 30-Year TIPS | 1-1/4% 10-Year TIPS |
| Description: | Series D-2019 | Series A-2020 | TIPS of February 2040 | Series D-2020 |
| CUSIP Number: | 912828LA6 | 912828MF4 | 912810QF8 | 912828NM8 |
| Dated Date: | July 15, 2009 | January 15, 2010 | February 15, 2010 | July 15, 2010 |
| Original Issue Date: | July 15, 2009 | January 15, 2010 | February 26, 2010 | July 15, 2010 |
| Additional Issue Date(s): | October 15, 2009 | April 15, 2010 | August 31, 2010 | September 15, 2010 |
| | | | | November 15, 2010 |
| Maturity Date: | July 15, 2019 | January 15, 2020 | February 15, 2040 | July 15, 2020 |
| Ref CPI on Dated Date: | 213.51819 | 216.24610 | 216.13950 | 218.08532 |

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)
Ref CPI and Index Ratios for
February 2019

| Date | | | Ref CPI | Index Ratio | Index Ratio | Index Ratio | Index Ratio | |
|-------------------------|----|------|---------------------|----------------|----------------------|----------------|----------------------|----------------|
| February | 1 | 2019 | 252.03800 | 1.15216 | 1.15091 | 1.11826 | 1.11356 | |
| February | 2 | 2019 | 252.00925 | 1.15203 | 1.15077 | 1.11813 | 1.11344 | |
| February | 3 | 2019 | 251.98050 | 1.15190 | 1.15064 | 1.11801 | 1.11331 | |
| February | 4 | 2019 | 251.95175 | 1.15177 | 1.15051 | 1.11788 | 1.11318 | |
| February | 5 | 2019 | 251.92300 | 1.15163 | 1.15038 | 1.11775 | 1.11305 | |
| February | 6 | 2019 | 251.89425 | 1.15150 | 1.15025 | 1.11762 | 1.11293 | |
| February | 7 | 2019 | 251.86550 | 1.15137 | 1.15012 | 1.11750 | 1.11280 | |
| February | 8 | 2019 | 251.83675 | 1.15124 | 1.14999 | 1.11737 | 1.11267 | |
| February | 9 | 2019 | 251.80800 | 1.15111 | 1.14986 | 1.11724 | 1.11255 | |
| February | 10 | 2019 | 251.77925 | 1.15098 | 1.14972 | 1.11711 | 1.11242 | |
| February | 11 | 2019 | 251.75050 | 1.15085 | 1.14959 | 1.11699 | 1.11229 | |
| February | 12 | 2019 | 251.72175 | 1.15071 | 1.14946 | 1.11686 | 1.11217 | |
| February | 13 | 2019 | 251.69300 | 1.15058 | 1.14933 | 1.11673 | 1.11204 | |
| February | 14 | 2019 | 251.66425 | 1.15045 | 1.14920 | 1.11660 | 1.11191 | |
| February | 15 | 2019 | 251.63550 | 1.15032 | 1.14907 | 1.11648 | 1.11178 | |
| February | 16 | 2019 | 251.60675 | 1.15019 | 1.14894 | 1.11635 | 1.11166 | |
| February | 17 | 2019 | 251.57800 | 1.15006 | 1.14881 | 1.11622 | 1.11153 | |
| February | 18 | 2019 | 251.54925 | 1.14993 | 1.14867 | 1.11609 | 1.11140 | |
| February | 19 | 2019 | 251.52050 | 1.14979 | 1.14854 | 1.11597 | 1.11128 | |
| February | 20 | 2019 | 251.49175 | 1.14966 | 1.14841 | 1.11584 | 1.11115 | |
| February | 21 | 2019 | 251.46300 | 1.14953 | 1.14828 | 1.11571 | 1.11102 | |
| February | 22 | 2019 | 251.43425 | 1.14940 | 1.14815 | 1.11558 | 1.11090 | |
| February | 23 | 2019 | 251.40550 | 1.14927 | 1.14802 | 1.11546 | 1.11077 | |
| February | 24 | 2019 | 251.37675 | 1.14914 | 1.14789 | 1.11533 | 1.11064 | |
| February | 25 | 2019 | 251.34800 | 1.14901 | 1.14775 | 1.11520 | 1.11051 | |
| February | 26 | 2019 | 251.31925 | 1.14887 | 1.14762 | 1.11507 | 1.11039 | |
| February | 27 | 2019 | 251.29050 | 1.14874 | 1.14749 | 1.11494 | 1.11026 | |
| February | 28 | 2019 | 251.26175 | 1.14861 | 1.14736 | 1.11482 | 1.11013 | |
| CPI-U (NSA) for: | | | October 2018 | 252.885 | November 2018 | 252.038 | December 2018 | 251.233 |

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|----------------------------------|--|---|---|--|
| Security: | 1-1/8% 10-Year TIPS | 2-1/8% 30-Year TIPS | 0-5/8% 10-Year TIPS | 0-1/8% 10-Year TIPS |
| Description: | Series A-2021 | TIPS of February 2041 | Series D-2021 | Series A-2022 |
| CUSIP Number: | 912828PP9 | 912810QP6 | 912828QV5 | 912828SA9 |
| Dated Date: | January 15, 2011 | February 15, 2011 | July 15, 2011 | January 15, 2012 |
| Original Issue Date: | January 31, 2011 | February 28, 2011 | July 29, 2011 | January 31, 2012 |
| Additional Issue Date(s): | March 31, 2011 May 31, 2011 | June 30, 2011 October 31, 2011 | September 30, 2011 November 30, 2011 | March 30, 2012 May 31, 2012 |
| Maturity Date: | January 15, 2021 | February 15, 2041 | July 15, 2021 | January 15, 2022 |
| Ref CPI on Dated Date: | 218.75255 | 218.99100 | 225.38381 | 226.33474 |

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)
Ref CPI and Index Ratios for
February 2019

| Security: Description: CUSIP Number: Dated Date: Original Issue Date: Additional Issue Date(s): | | | 0-3/4% 30-Year TIPS TIPS of February 2042 912810QV3 February 15, 2012 February 29, 2012 June 29, 2012 October 31, 2012 | 0-1/8% 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 |
|--|---------------------|----------------|--|--|---|--|
| Maturity Date: Ref CPI on Dated Date: | | | February 15, 2042 225.96062 | July 15, 2022 229.96306 | January 15, 2023 230.82203 | February 15, 2043 229.91100 |
| Date | Ref CPI | Index Ratio | Index Ratio | Index Ratio | Index Ratio | |
| February 1 2019 | 252.03800 | 1.11541 | 1.09599 | 1.09191 | 1.09624 | |
| February 2 2019 | 252.00925 | 1.11528 | 1.09587 | 1.09179 | 1.09612 | |
| February 3 2019 | 251.98050 | 1.11515 | 1.09574 | 1.09167 | 1.09599 | |
| February 4 2019 | 251.95175 | 1.11503 | 1.09562 | 1.09154 | 1.09587 | |
| February 5 2019 | 251.92300 | 1.11490 | 1.09549 | 1.09142 | 1.09574 | |
| February 6 2019 | 251.89425 | 1.11477 | 1.09537 | 1.09129 | 1.09562 | |
| February 7 2019 | 251.86550 | 1.11464 | 1.09524 | 1.09117 | 1.09549 | |
| February 8 2019 | 251.83675 | 1.11452 | 1.09512 | 1.09104 | 1.09537 | |
| February 9 2019 | 251.80800 | 1.11439 | 1.09499 | 1.09092 | 1.09524 | |
| February 10 2019 | 251.77925 | 1.11426 | 1.09487 | 1.09079 | 1.09512 | |
| February 11 2019 | 251.75050 | 1.11413 | 1.09474 | 1.09067 | 1.09499 | |
| February 12 2019 | 251.72175 | 1.11401 | 1.09462 | 1.09054 | 1.09487 | |
| February 13 2019 | 251.69300 | 1.11388 | 1.09449 | 1.09042 | 1.09474 | |
| February 14 2019 | 251.66425 | 1.11375 | 1.09437 | 1.09030 | 1.09462 | |
| February 15 2019 | 251.63550 | 1.11363 | 1.09424 | 1.09017 | 1.09449 | |
| February 16 2019 | 251.60675 | 1.11350 | 1.09412 | 1.09005 | 1.09437 | |
| February 17 2019 | 251.57800 | 1.11337 | 1.09399 | 1.08992 | 1.09424 | |
| February 18 2019 | 251.54925 | 1.11324 | 1.09387 | 1.08980 | 1.09412 | |
| February 19 2019 | 251.52050 | 1.11312 | 1.09374 | 1.08967 | 1.09399 | |
| February 20 2019 | 251.49175 | 1.11299 | 1.09362 | 1.08955 | 1.09387 | |
| February 21 2019 | 251.46300 | 1.11286 | 1.09349 | 1.08942 | 1.09374 | |
| February 22 2019 | 251.43425 | 1.11273 | 1.09337 | 1.08930 | 1.09362 | |
| February 23 2019 | 251.40550 | 1.11261 | 1.09324 | 1.08917 | 1.09349 | |
| February 24 2019 | 251.37675 | 1.11248 | 1.09312 | 1.08905 | 1.09337 | |
| February 25 2019 | 251.34800 | 1.11235 | 1.09299 | 1.08893 | 1.09324 | |
| February 26 2019 | 251.31925 | 1.11223 | 1.09287 | 1.08880 | 1.09312 | |
| February 27 2019 | 251.29050 | 1.11210 | 1.09274 | 1.08868 | 1.09299 | |
| February 28 2019 | 251.26175 | 1.11197 | 1.09262 | 1.08855 | 1.09287 | |
| CPI-U (NSA) for: | October 2018 | 252.885 | November 2018 | 252.038 | December 2018 | 251.233 |

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)
Ref CPI and Index Ratios for
February 2019

| Date | | | Ref CPI | Index Ratio | Index Ratio | Index Ratio | Index Ratio | |
|-------------------------|----|------|---------------------|----------------|----------------------|----------------|----------------------|----------------|
| February | 1 | 2019 | 252.03800 | 1.08302 | 1.08018 | 1.08143 | 1.07562 | |
| February | 2 | 2019 | 252.00925 | 1.08290 | 1.08005 | 1.08131 | 1.07549 | |
| February | 3 | 2019 | 251.98050 | 1.08277 | 1.07993 | 1.08119 | 1.07537 | |
| February | 4 | 2019 | 251.95175 | 1.08265 | 1.07981 | 1.08106 | 1.07525 | |
| February | 5 | 2019 | 251.92300 | 1.08252 | 1.07968 | 1.08094 | 1.07513 | |
| February | 6 | 2019 | 251.89425 | 1.08240 | 1.07956 | 1.08082 | 1.07500 | |
| February | 7 | 2019 | 251.86550 | 1.08228 | 1.07944 | 1.08069 | 1.07488 | |
| February | 8 | 2019 | 251.83675 | 1.08215 | 1.07931 | 1.08057 | 1.07476 | |
| February | 9 | 2019 | 251.80800 | 1.08203 | 1.07919 | 1.08045 | 1.07463 | |
| February | 10 | 2019 | 251.77925 | 1.08191 | 1.07907 | 1.08032 | 1.07451 | |
| February | 11 | 2019 | 251.75050 | 1.08178 | 1.07894 | 1.08020 | 1.07439 | |
| February | 12 | 2019 | 251.72175 | 1.08166 | 1.07882 | 1.08008 | 1.07427 | |
| February | 13 | 2019 | 251.69300 | 1.08154 | 1.07870 | 1.07995 | 1.07414 | |
| February | 14 | 2019 | 251.66425 | 1.08141 | 1.07857 | 1.07983 | 1.07402 | |
| February | 15 | 2019 | 251.63550 | 1.08129 | 1.07845 | 1.07971 | 1.07390 | |
| February | 16 | 2019 | 251.60675 | 1.08117 | 1.07833 | 1.07958 | 1.07378 | |
| February | 17 | 2019 | 251.57800 | 1.08104 | 1.07820 | 1.07946 | 1.07365 | |
| February | 18 | 2019 | 251.54925 | 1.08092 | 1.07808 | 1.07934 | 1.07353 | |
| February | 19 | 2019 | 251.52050 | 1.08080 | 1.07796 | 1.07921 | 1.07341 | |
| February | 20 | 2019 | 251.49175 | 1.08067 | 1.07783 | 1.07909 | 1.07328 | |
| February | 21 | 2019 | 251.46300 | 1.08055 | 1.07771 | 1.07897 | 1.07316 | |
| February | 22 | 2019 | 251.43425 | 1.08042 | 1.07759 | 1.07884 | 1.07304 | |
| February | 23 | 2019 | 251.40550 | 1.08030 | 1.07746 | 1.07872 | 1.07292 | |
| February | 24 | 2019 | 251.37675 | 1.08018 | 1.07734 | 1.07860 | 1.07279 | |
| February | 25 | 2019 | 251.34800 | 1.08005 | 1.07722 | 1.07847 | 1.07267 | |
| February | 26 | 2019 | 251.31925 | 1.07993 | 1.07710 | 1.07835 | 1.07255 | |
| February | 27 | 2019 | 251.29050 | 1.07981 | 1.07697 | 1.07823 | 1.07243 | |
| February | 28 | 2019 | 251.26175 | 1.07968 | 1.07685 | 1.07810 | 1.07230 | |
| CPI-U (NSA) for: | | | October 2018 | 252.885 | November 2018 | 252.038 | December 2018 | 251.233 |

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|----------------------------------|---|--|---|--|
| Security: | 0-3/8% 10-Year TIPS | 0-5/8% 10-Year TIPS | 1-3/8% 30-Year TIPS | 0-1/8% 5-Year TIPS |
| Description: | Series D-2023 | Series A-2024 | TIPS of February 2044 | Series X-2019 |
| CUSIP Number: | 912828VM9 | 912828B25 | 912810RF7 | 912828C99 |
| Dated Date: | July 15, 2013 | January 15, 2014 | February 15, 2014 | April 15, 2014 |
| Original Issue Date: | July 31, 2013 | January 31, 2014 | February 28, 2014 | April 30, 2014 |
| Additional Issue Date(s): | September 30, 2013 November 29, 2013 | March 31, 2014 May 30, 2014 | June 30, 2014 October 31, 2014 | August 29, 2014 December 31, 2014 |
| Maturity Date: | July 15, 2023 | January 15, 2024 | February 15, 2044 | April 15, 2019 |
| Ref CPI on Dated Date: | 232.71797 | 233.33058 | 233.05900 | 234.31967 |

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)
Ref CPI and Index Ratios for
February 2019

| Date | | | Ref CPI | Index Ratio | Index Ratio | Index Ratio | Index Ratio | |
|-------------------------|----|------|---------------------|----------------|----------------------|----------------|----------------------|----------------|
| February | 1 | 2019 | 252.03800 | 1.06145 | 1.06411 | 1.07031 | 1.07625 | |
| February | 2 | 2019 | 252.00925 | 1.06133 | 1.06399 | 1.07019 | 1.07613 | |
| February | 3 | 2019 | 251.98050 | 1.06121 | 1.06386 | 1.07006 | 1.07601 | |
| February | 4 | 2019 | 251.95175 | 1.06109 | 1.06374 | 1.06994 | 1.07589 | |
| February | 5 | 2019 | 251.92300 | 1.06097 | 1.06362 | 1.06982 | 1.07576 | |
| February | 6 | 2019 | 251.89425 | 1.06085 | 1.06350 | 1.06970 | 1.07564 | |
| February | 7 | 2019 | 251.86550 | 1.06073 | 1.06338 | 1.06958 | 1.07552 | |
| February | 8 | 2019 | 251.83675 | 1.06061 | 1.06326 | 1.06945 | 1.07540 | |
| February | 9 | 2019 | 251.80800 | 1.06049 | 1.06314 | 1.06933 | 1.07527 | |
| February | 10 | 2019 | 251.77925 | 1.06036 | 1.06301 | 1.06921 | 1.07515 | |
| February | 11 | 2019 | 251.75050 | 1.06024 | 1.06289 | 1.06909 | 1.07503 | |
| February | 12 | 2019 | 251.72175 | 1.06012 | 1.06277 | 1.06897 | 1.07490 | |
| February | 13 | 2019 | 251.69300 | 1.06000 | 1.06265 | 1.06884 | 1.07478 | |
| February | 14 | 2019 | 251.66425 | 1.05988 | 1.06253 | 1.06872 | 1.07466 | |
| February | 15 | 2019 | 251.63550 | 1.05976 | 1.06241 | 1.06860 | 1.07454 | |
| February | 16 | 2019 | 251.60675 | 1.05964 | 1.06229 | 1.06848 | 1.07441 | |
| February | 17 | 2019 | 251.57800 | 1.05952 | 1.06216 | 1.06836 | 1.07429 | |
| February | 18 | 2019 | 251.54925 | 1.05940 | 1.06204 | 1.06823 | 1.07417 | |
| February | 19 | 2019 | 251.52050 | 1.05927 | 1.06192 | 1.06811 | 1.07404 | |
| February | 20 | 2019 | 251.49175 | 1.05915 | 1.06180 | 1.06799 | 1.07392 | |
| February | 21 | 2019 | 251.46300 | 1.05903 | 1.06168 | 1.06787 | 1.07380 | |
| February | 22 | 2019 | 251.43425 | 1.05891 | 1.06156 | 1.06775 | 1.07368 | |
| February | 23 | 2019 | 251.40550 | 1.05879 | 1.06144 | 1.06762 | 1.07355 | |
| February | 24 | 2019 | 251.37675 | 1.05867 | 1.06132 | 1.06750 | 1.07343 | |
| February | 25 | 2019 | 251.34800 | 1.05855 | 1.06119 | 1.06738 | 1.07331 | |
| February | 26 | 2019 | 251.31925 | 1.05843 | 1.06107 | 1.06726 | 1.07319 | |
| February | 27 | 2019 | 251.29050 | 1.05831 | 1.06095 | 1.06713 | 1.07306 | |
| February | 28 | 2019 | 251.26175 | 1.05819 | 1.06083 | 1.06701 | 1.07294 | |
| CPI-U (NSA) for: | | | October 2018 | 252.885 | November 2018 | 252.038 | December 2018 | 251.233 |

| | | | | |
|----------------------------------|---|--|---|--|
| Security: | 0-1/8% 10-Year TIPS | 0-1/4% 10-Year TIPS | 0-3/4% 30-Year TIPS | 0-1/8% 5-Year TIPS |
| Description: | Series D-2024 | Series A-2025 | TIPS of February 2045 | Series X-2020 |
| CUSIP Number: | 912828WU0 | 912828H45 | 912810RL4 | 912828K33 |
| Dated Date: | July 15, 2014 | January 15, 2015 | February 15, 2015 | April 15, 2015 |
| Original Issue Date: | July 31, 2014 | January 30, 2015 | February 27, 2015 | April 30, 2015 |
| Additional Issue Date(s): | September 30, 2014 November 28, 2014 | March 31, 2015 May 29, 2015 | June 30, 2015 October 30, 2015 | August 31, 2015 December 31, 2015 |
| Maturity Date: | July 15, 2024 | January 15, 2025 | February 15, 2045 | April 15, 2020 |
| Ref CPI on Dated Date: | 237.44594 | 236.85403 | 235.48150 | 234.18067 |

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)
Ref CPI and Index Ratios for
February 2019

| Security: Description: CUSIP Number: Dated Date: Original Issue Date: Additional Issue Date(s): | | | 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 | 0-1/8% 5-Year TIPS Series X-2021 912828Q60 April 15, 2016 April 29, 2016 August 31, 2016 December 30, 2016 |
|--|---------------------|----------------|--|---|--|--|
| Maturity Date: Ref CPI on Dated Date: | | | July 15, 2025 237.14365 | January 15, 2026 237.61129 | February 15, 2046 236.94448 | April 15, 2021 237.00700 |
| Date | Ref CPI | Index Ratio | Index Ratio | Index Ratio | Index Ratio | |
| February 1 2019 | 252.03800 | 1.06281 | 1.06072 | 1.06370 | 1.06342 | |
| February 2 2019 | 252.00925 | 1.06269 | 1.06059 | 1.06358 | 1.06330 | |
| February 3 2019 | 251.98050 | 1.06256 | 1.06047 | 1.06346 | 1.06318 | |
| February 4 2019 | 251.95175 | 1.06244 | 1.06035 | 1.06334 | 1.06306 | |
| February 5 2019 | 251.92300 | 1.06232 | 1.06023 | 1.06322 | 1.06293 | |
| February 6 2019 | 251.89425 | 1.06220 | 1.06011 | 1.06309 | 1.06281 | |
| February 7 2019 | 251.86550 | 1.06208 | 1.05999 | 1.06297 | 1.06269 | |
| February 8 2019 | 251.83675 | 1.06196 | 1.05987 | 1.06285 | 1.06257 | |
| February 9 2019 | 251.80800 | 1.06184 | 1.05975 | 1.06273 | 1.06245 | |
| February 10 2019 | 251.77925 | 1.06172 | 1.05963 | 1.06261 | 1.06233 | |
| February 11 2019 | 251.75050 | 1.06159 | 1.05951 | 1.06249 | 1.06221 | |
| February 12 2019 | 251.72175 | 1.06147 | 1.05938 | 1.06237 | 1.06209 | |
| February 13 2019 | 251.69300 | 1.06135 | 1.05926 | 1.06224 | 1.06196 | |
| February 14 2019 | 251.66425 | 1.06123 | 1.05914 | 1.06212 | 1.06184 | |
| February 15 2019 | 251.63550 | 1.06111 | 1.05902 | 1.06200 | 1.06172 | |
| February 16 2019 | 251.60675 | 1.06099 | 1.05890 | 1.06188 | 1.06160 | |
| February 17 2019 | 251.57800 | 1.06087 | 1.05878 | 1.06176 | 1.06148 | |
| February 18 2019 | 251.54925 | 1.06075 | 1.05866 | 1.06164 | 1.06136 | |
| February 19 2019 | 251.52050 | 1.06063 | 1.05854 | 1.06152 | 1.06124 | |
| February 20 2019 | 251.49175 | 1.06050 | 1.05842 | 1.06140 | 1.06112 | |
| February 21 2019 | 251.46300 | 1.06038 | 1.05830 | 1.06127 | 1.06099 | |
| February 22 2019 | 251.43425 | 1.06026 | 1.05817 | 1.06115 | 1.06087 | |
| February 23 2019 | 251.40550 | 1.06014 | 1.05805 | 1.06103 | 1.06075 | |
| February 24 2019 | 251.37675 | 1.06002 | 1.05793 | 1.06091 | 1.06063 | |
| February 25 2019 | 251.34800 | 1.05990 | 1.05781 | 1.06079 | 1.06051 | |
| February 26 2019 | 251.31925 | 1.05978 | 1.05769 | 1.06067 | 1.06039 | |
| February 27 2019 | 251.29050 | 1.05966 | 1.05757 | 1.06055 | 1.06027 | |
| February 28 2019 | 251.26175 | 1.05953 | 1.05745 | 1.06042 | 1.06014 | |
| CPI-U (NSA) for: | October 2018 | 252.885 | November 2018 | 252.038 | December 2018 | 251.233 |

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)
Ref CPI and Index Ratios for
February 2019

| Date | | | Ref CPI | Index Ratio | Index Ratio | Index Ratio | Index Ratio | |
|-------------------------|----|------|---------------------|----------------|----------------------|----------------|----------------------|----------------|
| February | 1 | 2019 | 252.03800 | 1.05147 | 1.04338 | 1.04410 | 1.03636 | |
| February | 2 | 2019 | 252.00925 | 1.05135 | 1.04326 | 1.04398 | 1.03624 | |
| February | 3 | 2019 | 251.98050 | 1.05123 | 1.04314 | 1.04386 | 1.03612 | |
| February | 4 | 2019 | 251.95175 | 1.05111 | 1.04302 | 1.04374 | 1.03600 | |
| February | 5 | 2019 | 251.92300 | 1.05099 | 1.04290 | 1.04362 | 1.03589 | |
| February | 6 | 2019 | 251.89425 | 1.05087 | 1.04278 | 1.04350 | 1.03577 | |
| February | 7 | 2019 | 251.86550 | 1.05075 | 1.04267 | 1.04339 | 1.03565 | |
| February | 8 | 2019 | 251.83675 | 1.05063 | 1.04255 | 1.04327 | 1.03553 | |
| February | 9 | 2019 | 251.80800 | 1.05051 | 1.04243 | 1.04315 | 1.03541 | |
| February | 10 | 2019 | 251.77925 | 1.05039 | 1.04231 | 1.04303 | 1.03530 | |
| February | 11 | 2019 | 251.75050 | 1.05027 | 1.04219 | 1.04291 | 1.03518 | |
| February | 12 | 2019 | 251.72175 | 1.05015 | 1.04207 | 1.04279 | 1.03506 | |
| February | 13 | 2019 | 251.69300 | 1.05003 | 1.04195 | 1.04267 | 1.03494 | |
| February | 14 | 2019 | 251.66425 | 1.04991 | 1.04183 | 1.04255 | 1.03482 | |
| February | 15 | 2019 | 251.63550 | 1.04979 | 1.04171 | 1.04243 | 1.03470 | |
| February | 16 | 2019 | 251.60675 | 1.04967 | 1.04159 | 1.04231 | 1.03459 | |
| February | 17 | 2019 | 251.57800 | 1.04955 | 1.04148 | 1.04219 | 1.03447 | |
| February | 18 | 2019 | 251.54925 | 1.04943 | 1.04136 | 1.04208 | 1.03435 | |
| February | 19 | 2019 | 251.52050 | 1.04931 | 1.04124 | 1.04196 | 1.03423 | |
| February | 20 | 2019 | 251.49175 | 1.04919 | 1.04112 | 1.04184 | 1.03411 | |
| February | 21 | 2019 | 251.46300 | 1.04907 | 1.04100 | 1.04172 | 1.03400 | |
| February | 22 | 2019 | 251.43425 | 1.04895 | 1.04088 | 1.04160 | 1.03388 | |
| February | 23 | 2019 | 251.40550 | 1.04883 | 1.04076 | 1.04148 | 1.03376 | |
| February | 24 | 2019 | 251.37675 | 1.04871 | 1.04064 | 1.04136 | 1.03364 | |
| February | 25 | 2019 | 251.34800 | 1.04859 | 1.04052 | 1.04124 | 1.03352 | |
| February | 26 | 2019 | 251.31925 | 1.04847 | 1.04040 | 1.04112 | 1.03340 | |
| February | 27 | 2019 | 251.29050 | 1.04835 | 1.04029 | 1.04100 | 1.03329 | |
| February | 28 | 2019 | 251.26175 | 1.04823 | 1.04017 | 1.04088 | 1.03317 | |
| CPI-U (NSA) for: | | | October 2018 | 252.885 | November 2018 | 252.038 | December 2018 | 251.233 |

| | | | | |
|----------------------------------|---|--|---|--|
| Security: | 0-1/8% 10-Year TIPS | 0-3/8% 10-Year TIPS | 0-7/8% 30-Year TIPS | 0-1/8% 5-Year TIPS |
| Description: | Series D-2026 | Series A-2027 | TIPS of February 2047 | Series X-2022 |
| CUSIP Number: | 912828S50 | 912828V49 | 912810RW0 | 912828X39 |
| Dated Date: | July 15, 2016 | January 15, 2017 | February 15, 2017 | April 15, 2017 |
| Original Issue Date: | July 29, 2016 | January 31, 2017 | February 28, 2017 | April 28, 2017 |
| Additional Issue Date(s): | September 30, 2016 November 30, 2016 | March 31, 2017 May 31, 2017 | June 30, 2017 October 31, 2017 | August 31, 2017 December 29, 2017 |
| Maturity Date: | July 15, 2026 | January 15, 2027 | February 15, 2047 | April 15, 2022 |
| Ref CPI on Dated Date: | 239.70132 | 241.55919 | 241.39250 | 243.19553 |

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)
Ref CPI and Index Ratios for
February 2019

| 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 | |
| February 1 2019 | 252.03800 | 1.03033 | 1.02178 | 1.02207 | 1.01468 | |
| February 2 2019 | 252.00925 | 1.03021 | 1.02166 | 1.02195 | 1.01456 | |
| February 3 2019 | 251.98050 | 1.03010 | 1.02155 | 1.02183 | 1.01445 | |
| February 4 2019 | 251.95175 | 1.02998 | 1.02143 | 1.02172 | 1.01433 | |
| February 5 2019 | 251.92300 | 1.02986 | 1.02131 | 1.02160 | 1.01422 | |
| February 6 2019 | 251.89425 | 1.02974 | 1.02120 | 1.02148 | 1.01410 | |
| February 7 2019 | 251.86550 | 1.02963 | 1.02108 | 1.02137 | 1.01399 | |
| February 8 2019 | 251.83675 | 1.02951 | 1.02096 | 1.02125 | 1.01387 | |
| February 9 2019 | 251.80800 | 1.02939 | 1.02085 | 1.02113 | 1.01375 | |
| February 10 2019 | 251.77925 | 1.02927 | 1.02073 | 1.02102 | 1.01364 | |
| February 11 2019 | 251.75050 | 1.02916 | 1.02061 | 1.02090 | 1.01352 | |
| February 12 2019 | 251.72175 | 1.02904 | 1.02050 | 1.02078 | 1.01341 | |
| February 13 2019 | 251.69300 | 1.02892 | 1.02038 | 1.02067 | 1.01329 | |
| February 14 2019 | 251.66425 | 1.02880 | 1.02026 | 1.02055 | 1.01318 | |
| February 15 2019 | 251.63550 | 1.02869 | 1.02015 | 1.02043 | 1.01306 | |
| February 16 2019 | 251.60675 | 1.02857 | 1.02003 | 1.02032 | 1.01294 | |
| February 17 2019 | 251.57800 | 1.02845 | 1.01991 | 1.02020 | 1.01283 | |
| February 18 2019 | 251.54925 | 1.02833 | 1.01980 | 1.02008 | 1.01271 | |
| February 19 2019 | 251.52050 | 1.02822 | 1.01968 | 1.01997 | 1.01260 | |
| February 20 2019 | 251.49175 | 1.02810 | 1.01957 | 1.01985 | 1.01248 | |
| February 21 2019 | 251.46300 | 1.02798 | 1.01945 | 1.01973 | 1.01237 | |
| February 22 2019 | 251.43425 | 1.02786 | 1.01933 | 1.01962 | 1.01225 | |
| February 23 2019 | 251.40550 | 1.02775 | 1.01922 | 1.01950 | 1.01213 | |
| February 24 2019 | 251.37675 | 1.02763 | 1.01910 | 1.01938 | 1.01202 | |
| February 25 2019 | 251.34800 | 1.02751 | 1.01898 | 1.01927 | 1.01190 | |
| February 26 2019 | 251.31925 | 1.02739 | 1.01887 | 1.01915 | 1.01179 | |
| February 27 2019 | 251.29050 | 1.02728 | 1.01875 | 1.01904 | 1.01167 | |
| February 28 2019 | 251.26175 | 1.02716 | 1.01863 | 1.01892 | 1.01156 | |
| CPI-U (NSA) for: | October 2018 | 252.885 | November 2018 | 252.038 | December 2018 | 251.233 |

TREASURY INFLATION-PROTECTED SECURITIES (TIPS)
Ref CPI and Index Ratios for
February 2019

| 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 | | | | | |
|--|----|------|---|----------------|----------------------|----------------|----------------------|----------------|
| Maturity Date: Ref CPI on Dated Date: | | | July 15, 2028 251.01658 | | | | | |
| Date | | | Ref CPI | Index Ratio | | | | |
| February | 1 | 2019 | 252.03800 | 1.00407 | | | | |
| February | 2 | 2019 | 252.00925 | 1.00395 | | | | |
| February | 3 | 2019 | 251.98050 | 1.00384 | | | | |
| February | 4 | 2019 | 251.95175 | 1.00373 | | | | |
| February | 5 | 2019 | 251.92300 | 1.00361 | | | | |
| February | 6 | 2019 | 251.89425 | 1.00350 | | | | |
| February | 7 | 2019 | 251.86550 | 1.00338 | | | | |
| February | 8 | 2019 | 251.83675 | 1.00327 | | | | |
| February | 9 | 2019 | 251.80800 | 1.00315 | | | | |
| February | 10 | 2019 | 251.77925 | 1.00304 | | | | |
| February | 11 | 2019 | 251.75050 | 1.00292 | | | | |
| February | 12 | 2019 | 251.72175 | 1.00281 | | | | |
| February | 13 | 2019 | 251.69300 | 1.00269 | | | | |
| February | 14 | 2019 | 251.66425 | 1.00258 | | | | |
| February | 15 | 2019 | 251.63550 | 1.00247 | | | | |
| February | 16 | 2019 | 251.60675 | 1.00235 | | | | |
| February | 17 | 2019 | 251.57800 | 1.00224 | | | | |
| February | 18 | 2019 | 251.54925 | 1.00212 | | | | |
| February | 19 | 2019 | 251.52050 | 1.00201 | | | | |
| February | 20 | 2019 | 251.49175 | 1.00189 | | | | |
| February | 21 | 2019 | 251.46300 | 1.00178 | | | | |
| February | 22 | 2019 | 251.43425 | 1.00166 | | | | |
| February | 23 | 2019 | 251.40550 | 1.00155 | | | | |
| February | 24 | 2019 | 251.37675 | 1.00143 | | | | |
| February | 25 | 2019 | 251.34800 | 1.00132 | | | | |
| February | 26 | 2019 | 251.31925 | 1.00121 | | | | |
| February | 27 | 2019 | 251.29050 | 1.00109 | | | | |
| February | 28 | 2019 | 251.26175 | 1.00098 | | | | |
| CPI-U (NSA) for: | | | October 2018 | 252.885 | November 2018 | 252.038 | December 2018 | 251.233 |