

# TIPS Daily Report - December 2, 2025

Date  
12/1/2025

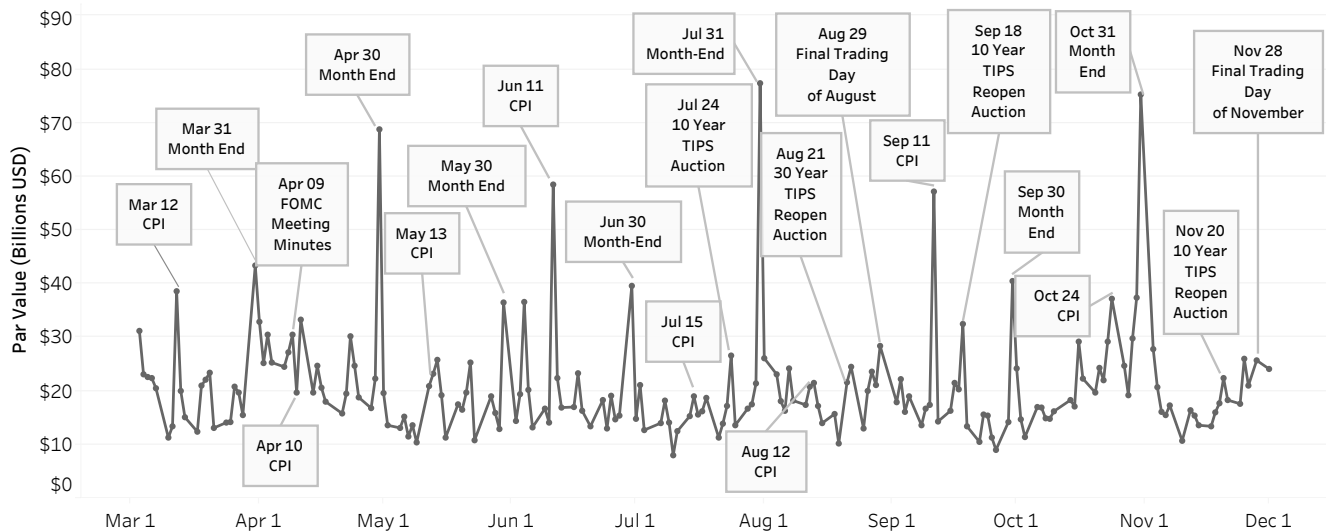
## Total Return Comparison Nominal vs Inflation Indexed

Total Return  
-28.36%  33.56%

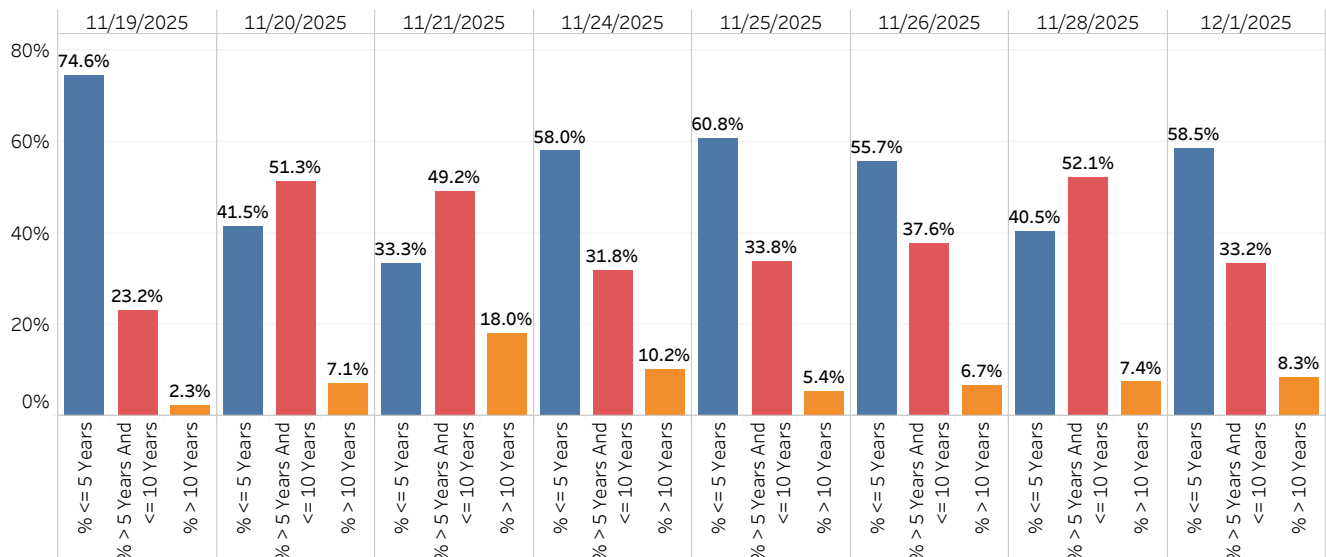
| Maturity  | MTD     |       | YTD     |       | 1 Year  |       | 2 Years |        | 5 Years |         | 10 Years |        |
|-----------|---------|-------|---------|-------|---------|-------|---------|--------|---------|---------|----------|--------|
|           | Nominal | TIPS  | Nominal | TIPS  | Nominal | TIPS  | Nominal | TIPS   | Nominal | TIPS    | Nominal  | TIPS   |
| 1-5 Year  | 0.00%   | 0.00% | 5.47%   | 6.42% | 5.38%   | 6.08% | 9.19%   | 11.18% | 6.20%   | 16.93%  | 17.47%   | 33.56% |
| 5-10 Year | 0.00%   | 0.00% | 8.16%   | 9.03% | 6.86%   | 7.43% | 8.76%   | 10.57% | -3.65%  | 6.32%   | 12.79%   | 31.65% |
| 10+ Year  | 0.00%   | 0.00% | 6.23%   | 5.07% | 2.94%   | 1.41% | -0.03%  | -0.42% | -28.36% | -25.55% | -6.95%   | 8.36%  |

## TIPS Trading Volume

Total Daily Trading Volume in Billions of US Dollars



## Daily TIPS Volume by Sector



# U.S. Inflation Heatmap

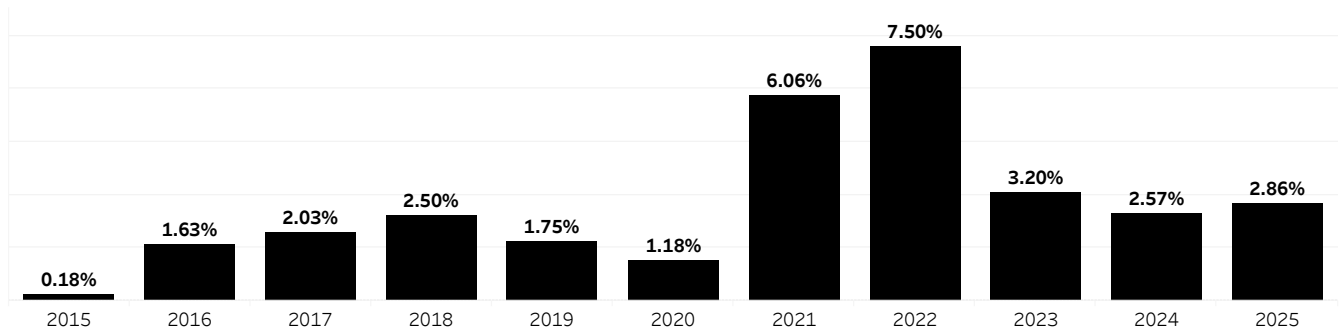
## Consumer Price Index Components

Month-over-Month % Change, Seasonally Adjusted

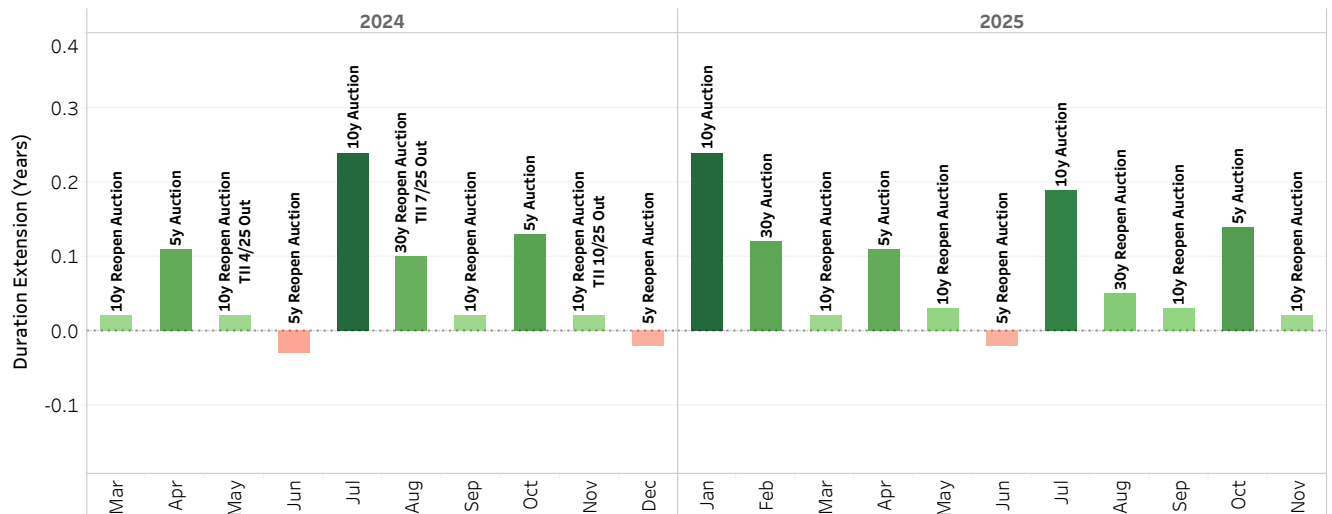
MoM % Change  
-6.25%  4.06%

|                           | 2024<br>Dec | Jan    | Feb    | Mar    | Apr    | 2025<br>May | Jun    | Jul    | Aug    | Sep    |
|---------------------------|-------------|--------|--------|--------|--------|-------------|--------|--------|--------|--------|
| Headline CPI              | 0.36%       | 0.47%  | 0.22%  | -0.05% | 0.22%  | 0.08%       | 0.29%  | 0.20%  | 0.38%  | 0.31%  |
| Core CPI                  | 0.21%       | 0.45%  | 0.23%  | 0.06%  | 0.24%  | 0.13%       | 0.23%  | 0.32%  | 0.35%  | 0.23%  |
| Core Services Ex-Housing  | 0.21%       | 0.76%  | 0.22%  | -0.24% | 0.21%  | 0.06%       | 0.21%  | 0.48%  | 0.33%  | 0.35%  |
| Energy                    | 2.42%       | 1.08%  | 0.20%  | -2.39% | 0.67%  | -0.98%      | 0.95%  | -1.07% | 0.69%  | 1.51%  |
| Gasoline                  | 4.02%       | 1.75%  | -0.96% | -6.25% | -0.09% | -2.65%      | 1.01%  | -2.17% | 1.91%  | 4.06%  |
| Electricity               | 0.20%       | -0.04% | 1.02%  | 0.94%  | 0.85%  | 0.90%       | 0.97%  | -0.11% | 0.20%  | -0.50% |
| Utility Gas               | 2.82%       | 1.79%  | 2.54%  | 3.57%  | 3.70%  | -0.96%      | 0.53%  | -0.86% | -1.60% | -1.21% |
| Food                      | 0.29%       | 0.36%  | 0.16%  | 0.44%  | -0.08% | 0.29%       | 0.33%  | 0.05%  | 0.46%  | 0.25%  |
| Food At Home              | 0.28%       | 0.46%  | 0.01%  | 0.49%  | -0.44% | 0.27%       | 0.28%  | -0.12% | 0.58%  | 0.32%  |
| Food Away From Home       | 0.30%       | 0.24%  | 0.39%  | 0.36%  | 0.44%  | 0.31%       | 0.40%  | 0.28%  | 0.29%  | 0.14%  |
| Core Goods                | -0.04%      | 0.28%  | 0.22%  | -0.09% | 0.06%  | -0.04%      | 0.20%  | 0.21%  | 0.28%  | 0.22%  |
| Apparel                   | 0.13%       | -1.38% | 0.60%  | 0.37%  | -0.20% | -0.42%      | 0.43%  | 0.07%  | 0.50%  | 0.73%  |
| New Vehicles              | 0.36%       | 0.04%  | -0.07% | 0.10%  | -0.01% | -0.29%      | -0.34% | 0.02%  | 0.28%  | 0.22%  |
| Used Cars and Trucks      | 0.76%       | 2.19%  | 0.88%  | -0.69% | -0.53% | -0.54%      | -0.67% | 0.48%  | 1.04%  | -0.41% |
| Core Services             | 0.26%       | 0.51%  | 0.25%  | 0.11%  | 0.29%  | 0.17%       | 0.25%  | 0.36%  | 0.35%  | 0.24%  |
| Shelter                   | 0.27%       | 0.37%  | 0.28%  | 0.22%  | 0.33%  | 0.25%       | 0.18%  | 0.23%  | 0.44%  | 0.21%  |
| Rent of Primary Residence | 0.30%       | 0.35%  | 0.28%  | 0.33%  | 0.34%  | 0.21%       | 0.23%  | 0.26%  | 0.30%  | 0.20%  |
| OER                       | 0.31%       | 0.31%  | 0.28%  | 0.40%  | 0.36%  | 0.27%       | 0.30%  | 0.28%  | 0.38%  | 0.13%  |

## Annual TIPS Inflation Accrual



## Monthly Duration Extension US TIPS (Series-L)



US TIPS Report

12/2/2025

| Issue  |        |           | Closing Level |           | Total Return |         |         | Breakevens |        |        |        |         |        |        |         |        |        | UST       |
|--------|--------|-----------|---------------|-----------|--------------|---------|---------|------------|--------|--------|--------|---------|--------|--------|---------|--------|--------|-----------|
| Issuer | Coupon | Mat. Date | Bid Price     | Bid Yield | MTD (%)      | QTD (%) | YTD (%) | Current    | 1d Chg | 5d Chg | 1m Chg | 3m High | 3m Low | 3m Avg | 1y High | 1y Low | 1y Avg | Mat. Date |
| TIPS   | 2.000  | 15-Jan-26 | 99.870        | 1.852     | 0.05         | 0.68    | 4.73    | 51.4       | 11.5   | 27.6   | -68.9  | 192.2   | 22.4   | 126.2  | 294.6   | 22.4   | 204.6  | 15-Feb-26 |
| TIPS   | 0.125  | 15-Apr-26 | 99.381        | 1.587     | 0.07         | 0.52    | 4.96    | 208.9      | -6.0   | 10.4   | -56.7  | 285.1   | 186.1  | 250.6  | 350.8   | 186.1  | 273.9  | 30-Apr-26 |
| TIPS   | 0.125  | 15-Jul-26 | 99.450        | 0.901     | 0.06         | 0.40    | 4.97    | 279.4      | -1.7   | 12.4   | -47.8  | 335.9   | 262.8  | 311.6  | 374.6   | 254.5  | 318.2  | 15-May-26 |
| TIPS   | 0.125  | 15-Oct-26 | 99.160        | 1.007     | 0.06         | 0.32    | 5.12    | 263.0      | 0.0    | 6.5    | -40.4  | 321.9   | 250.7  | 294.8  | 342.4   | 250.7  | 301.3  | 31-Oct-26 |
| TIPS   | 2.375  | 15-Jan-27 | 101.084       | 1.307     | 0.07         | 0.30    | 5.34    | 186.9      | -3.5   | 2.6    | -36.6  | 243.5   | 175.2  | 217.2  | 267.0   | 175.2  | 228.6  | 15-Feb-27 |
| TIPS   | 0.375  | 15-Jan-27 | 98.847        | 1.329     | 0.05         | 0.26    | 5.36    | 231.1      | -1.1   | 5.5    | -34.0  | 292.2   | 223.0  | 261.2  | 308.3   | 223.0  | 272.6  | 15-Nov-26 |
| TIPS   | 0.125  | 15-Apr-27 | 98.237        | 1.371     | 0.04         | 0.24    | 5.64    | 219.2      | -1.9   | 3.3    | -30.7  | 274.1   | 212.1  | 248.2  | 290.5   | 212.1  | 258.5  | 30-Apr-27 |
| TIPS   | 0.375  | 15-Jul-27 | 98.900        | 1.010     | 0.03         | 0.20    | 5.86    | 252.2      | -2.3   | 1.9    | -25.9  | 301.0   | 246.5  | 277.1  | 306.1   | 243.3  | 280.6  | 15-Aug-27 |
| TIPS   | 1.625  | 15-Oct-27 | 100.954       | 1.061     | 0.04         | 0.21    | 6.07    | 246.2      | -1.8   | 2.2    | -24.3  | 293.0   | 241.0  | 269.8  | 297.0   | 238.8  | 273.0  | 30-Sep-27 |
| TIPS   | 1.750  | 15-Jan-28 | 101.015       | 1.232     | 0.04         | 0.24    | 6.37    | 214.8      | -1.4   | 2.5    | -24.5  | 258.3   | 206.8  | 237.0  | 267.3   | 206.8  | 241.2  | 15-Nov-27 |
| TIPS   | 0.500  | 15-Jan-28 | 98.381        | 1.227     | 0.01         | 0.20    | 6.39    | 227.3      | -0.2   | 2.7    | -22.3  | 271.5   | 220.9  | 250.0  | 277.6   | 220.9  | 255.8  | 15-Feb-28 |
| TIPS   | 3.625  | 15-Apr-28 | 105.359       | 1.261     | 0.03         | 0.22    | 6.59    | 212.8      | -0.5   | 3.0    | -21.4  | 254.9   | 206.7  | 234.2  | 258.9   | 206.7  | 237.0  | 15-Aug-28 |
| TIPS   | 1.250  | 15-Apr-28 | 99.809        | 1.297     | 0.01         | 0.22    | 6.63    | 220.3      | -1.1   | 1.8    | -22.4  | 264.4   | 215.2  | 242.2  | 268.2   | 215.2  | 247.6  | 31-Mar-28 |
| TIPS   | 0.750  | 15-Jul-28 | 99.046        | 1.090     | -0.01        | 0.22    | 6.84    | 241.5      | -1.0   | 1.9    | -18.8  | 282.7   | 237.1  | 261.4  | 286.8   | 237.1  | 264.8  | 15-Aug-28 |
| TIPS   | 2.375  | 15-Oct-28 | 103.366       | 1.152     | -0.02        | 0.20    | 6.94    | 236.2      | -1.5   | 1.0    | -18.4  | 275.5   | 232.9  | 255.6  | 279.5   | 232.9  | 259.6  | 30-Sep-28 |
| TIPS   | 2.500  | 15-Jan-29 | 103.656       | 1.269     | -0.02        | 0.16    | 7.14    | 213.8      | -2.4   | 0.9    | -18.0  | 250.9   | 209.9  | 232.4  | 253.1   | 209.9  | 233.7  | 15-Feb-29 |
| TIPS   | 0.875  | 15-Jan-29 | 98.710        | 1.267     | -0.05        | 0.17    | 7.22    | 225.4      | -1.6   | 1.2    | -17.2  | 264.2   | 221.3  | 244.8  | 268.2   | 221.3  | 248.3  | 15-Nov-28 |
| TIPS   | 3.875  | 15-Apr-29 | 108.244       | 1.322     | -0.05        | 0.19    | 7.25    | 208.5      | -0.6   | 1.3    | -16.0  | 245.1   | 204.4  | 225.5  | 247.2   | 204.4  | 227.8  | 15-Feb-29 |
| TIPS   | 2.125  | 15-Apr-29 | 102.511       | 1.336     | -0.06        | 0.23    | 7.33    | 221.6      | -1.4   | 0.5    | -16.2  | 258.4   | 218.7  | 239.7  | 262.2   | 218.7  | 243.6  | 30-Apr-29 |
| TIPS   | 0.250  | 15-Jul-29 | 96.587        | 1.191     | -0.11        | 0.17    | 7.56    | 236.8      | -1.3   | 1.0    | -14.9  | 270.1   | 233.5  | 253.4  | 274.0   | 233.5  | 255.7  | 15-May-29 |
| TIPS   | 1.625  | 15-Oct-29 | 101.359       | 1.245     | -0.12        | 0.24    | 7.63    | 235.0      | -1.6   | 0.5    | -14.0  | 266.7   | 232.4  | 250.9  | 270.2   | 232.4  | 253.2  | 31-Oct-29 |
| TIPS   | 0.125  | 15-Jan-30 | 95.107        | 1.324     | -0.17        | 0.20    | 7.91    | 223.0      | -1.1   | 0.6    | -11.5  | 253.0   | 220.3  | 237.5  | 258.4   | 220.3  | 240.3  | 15-Nov-29 |
| TIPS   | 1.625  | 15-Apr-30 | 100.931       | 1.386     | -0.20        | 0.23    | N/A     | 223.5      | -1.2   | -0.4   | -11.4  | 252.9   | 222.0  | 238.1  | 256.1   | 222.0  | 240.9  | 30-Apr-30 |
| TIPS   | 0.125  | 15-Jul-30 | 94.732        | 1.282     | -0.21        | 0.19    | 8.26    | 235.6      | -0.9   | 0.1    | -10.9  | 264.2   | 233.9  | 249.5  | 268.5   | 232.8  | 252.1  | 15-Aug-30 |
| TIPS   | 1.125  | 15-Oct-30 | 98.954        | 1.331     | -0.23        | N/A     | N/A     | 232.5      | -1.1   | 0.7    | N/A    | 241.5   | 230.3  | 236.3  | 241.5   | 230.3  | 236.3  | 31-Oct-30 |
| TIPS   | 0.125  | 15-Jan-31 | 93.610        | 1.405     | -0.25        | 0.28    | 8.67    | 222.8      | -1.2   | 0.1    | -8.8   | 249.2   | 221.3  | 235.2  | 255.9   | 218.2  | 238.0  | 15-Feb-31 |
| TIPS   | 0.125  | 15-Jul-31 | 93.107        | 1.387     | -0.28        | 0.28    | 8.95    | 234.6      | -0.6   | 0.3    | -7.7   | 259.6   | 232.9  | 246.0  | 264.7   | 229.5  | 248.6  | 15-Aug-31 |
| TIPS   | 0.125  | 15-Jan-32 | 91.839        | 1.506     | -0.33        | 0.34    | 9.15    | 228.0      | -0.7   | 0.6    | -5.7   | 251.0   | 225.7  | 237.9  | 256.4   | 220.9  | 240.5  | 15-Feb-32 |
| TIPS   | 3.375  | 15-Apr-32 | 111.175       | 1.503     | -0.26        | 0.46    | 8.70    | 214.0      | -0.9   | 0.5    | -6.2   | 234.9   | 211.5  | 223.7  | 246.9   | 207.2  | 228.4  | 15-Feb-31 |
| TIPS   | 0.625  | 15-Jul-32 | 94.427        | 1.497     | -0.30        | 0.44    | 9.35    | 233.3      | -0.5   | 1.8    | -4.7   | 254.4   | 230.1  | 242.0  | 260.3   | 225.0  | 243.9  | 15-Aug-32 |
| TIPS   | 1.125  | 15-Jan-33 | 96.641        | 1.612     | -0.34        | 0.49    | 9.21    | 223.0      | -0.3   | 2.3    | -3.7   | 241.1   | 219.5  | 230.7  | 250.2   | 214.2  | 233.1  | 15-Nov-32 |
| TIPS   | 1.375  | 15-Jul-33 | 98.175        | 1.616     | -0.34        | 0.52    | 9.33    | 227.0      | -0.3   | 1.9    | -3.6   | 244.8   | 223.8  | 234.6  | 255.6   | 222.5  | 237.9  | 15-May-33 |
| TIPS   | 1.750  | 15-Jan-34 | 100.145       | 1.721     | -0.35        | 0.56    | 9.18    | 222.2      | -0.2   | 1.5    | -3.9   | 240.3   | 219.4  | 230.2  | 250.2   | 218.2  | 234.2  | 15-Feb-34 |
| TIPS   | 1.875  | 15-Jul-34 | 101.114       | 1.726     | -0.39        | 0.57    | 9.17    | 223.3      | -0.5   | 0.9    | -4.3   | 240.5   | 221.2  | 231.4  | 252.9   | 221.2  | 235.9  | 15-May-34 |
| TIPS   | 2.125  | 15-Jan-35 | 102.504       | 1.819     | -0.39        | 0.52    | N/A     | 218.8      | -0.6   | 0.7    | -4.7   | 236.6   | 216.7  | 227.3  | 247.8   | 216.7  | 231.9  | 15-Nov-34 |
| TIPS   | 1.875  | 15-Jul-35 | 100.427       | 1.820     | -0.43        | 0.53    | N/A     | 224.5      | -0.4   | 0.8    | -4.2   | 239.4   | 222.5  | 231.7  | 239.4   | 222.5  | 231.7  | 15-Aug-35 |
| TIPS   | 2.125  | 15-Feb-40 | 99.854        | 2.110     | -0.65        | 0.15    | 8.67    | 232.6      | -0.2   | 2.7    | -1.2   | 247.0   | 229.2  | 237.0  | 252.5   | 225.0  | 239.6  | 15-Feb-40 |
| TIPS   | 2.125  | 15-Feb-41 | 98.885        | 2.186     | -0.66        | 0.05    | 7.40    | 231.6      | -0.2   | 3.1    | -1.1   | 244.6   | 227.6  | 235.7  | 253.4   | 227.5  | 240.1  | 15-Feb-41 |
| TIPS   | 0.750  | 15-Feb-42 | 78.687        | 2.310     | -0.83        | 0.15    | 6.75    | 229.9      | 0.5    | 3.5    | -1.2   | 244.1   | 225.5  | 233.9  | 253.7   | 225.5  | 239.3  | 15-Feb-42 |
| TIPS   | 0.625  | 15-Feb-43 | 75.282        | 2.360     | -0.92        | 0.05    | 6.73    | 230.9      | 0.2    | 2.6    | -2.1   | 244.3   | 227.2  | 235.5  | 253.8   | 227.2  | 240.4  | 15-Feb-43 |
| TIPS   | 1.375  | 15-Feb-44 | 84.679        | 2.397     | -0.86        | 0.06    | 6.50    | 230.5      | 0.2    | 2.5    | -1.7   | 241.9   | 227.0  | 234.2  | 253.3   | 227.0  | 239.6  | 15-Feb-44 |
| TIPS   | 0.750  | 15-Feb-45 | 73.900        | 2.440     | -0.97        | 0.10    | 6.13    | 232.1      | 0.5    | 2.9    | -0.2   | 241.8   | 228.4  | 234.7  | 252.8   | 228.4  | 240.1  | 15-Feb-45 |
| TIPS   | 1.000  | 15-Feb-46 | 76.450        | 2.468     | -0.97        | 0.20    | 5.95    | 231.3      | 0.1    | 2.9    | 0.3    | 240.7   | 227.5  | 233.5  | 251.1   | 227.5  | 239.3  | 15-Feb-46 |
| TIPS   | 0.875  | 15-Feb-47 | 73.175        | 2.494     | -0.97        | 0.10    | 5.46    | 228.6      | 0.4    | 2.9    | -0.3   | 238.3   | 224.8  | 231.2  | 252.1   | 224.8  | 238.1  | 15-Feb-47 |
| TIPS   | 1.000  | 15-Feb-48 | 74.175        | 2.506     | -0.98        | 0.04    | 5.18    | 228.8      | 0.1    | 2.4    | -0.5   | 238.7   | 225.6  | 231.8  | 252.5   | 225.6  | 238.7  | 15-Feb-48 |
| TIPS   | 1.000  | 15-Feb-49 | 73.069        | 2.524     | -1.03        | 0.08    | 4.70    | 228.0      | 0.1    | 2.5    | 0.0    | 237.0   | 225.2  | 230.5  | 251.8   | 225.2  | 237.9  | 15-Feb-49 |
| TIPS   | 0.250  | 15-Feb-50 | 58.572        | 2.534     | -1.21        | 0.00    | 3.99    | 229.8      | 0.3    | 1.8    | 0.9    | 238.4   | 227.2  | 231.8  | 251.7   | 227.2  | 238.4  | 15-Feb-50 |
| TIPS   | 0.125  | 15-Feb-51 | 54.969        | 2.538     | -1.29        | 0.01    | 3.30    | 230.0      | 0.2    | 1.9    | 0.9    | 238.5   | 227.2  | 231.6  | 251.3   | 226.4  | 237.9  | 15-Feb-51 |
| TIPS   | 0.125  | 15-Feb-52 | 53.862        | 2.533     | -1.24        | 0.27    | 2.66    | 228.7      | 0.2    | 2.0    | 1.4    | 236.9   | 225.3  | 230.0  | 251.1   | 225.3  | 237.1  | 15-Feb-52 |
| TIPS   | 1.500  | 15-Feb-53 | 79.359        | 2.545     | -0.99        | 0.25    | 3.80    | 223.2      | 0.4    | 2.5    | 1.1    | 231.7   | 220.4  | 225.0  | 242.8   | 218.9  | 230.9  | 15-Feb-53 |

ARBOR RESEARCH & TRADING, L.L.C.

US 800-876-1825 / US 847-304-1550 / UK 44-207-556-7309

|      |       |           |        |       |       |      |      |       |     |     |     |       |       |       |       |       |       |           |
|------|-------|-----------|--------|-------|-------|------|------|-------|-----|-----|-----|-------|-------|-------|-------|-------|-------|-----------|
| TIPS | 2.125 | 15-Feb-54 | 91.450 | 2.542 | -1.01 | 0.19 | 3.91 | 221.4 | 0.0 | 2.0 | 0.6 | 230.6 | 218.9 | 223.7 | 240.2 | 216.0 | 229.0 | 15-Feb-54 |
| TIPS | 2.375 | 15-Feb-55 | 96.671 | 2.528 | -1.01 | 0.12 | N/A  | 221.3 | 0.1 | 1.9 | 0.0 | 230.2 | 218.7 | 223.8 | 237.0 | 213.0 | 226.0 | 15-Feb-55 |

US TIPS Total Return Performance vs. Nominal

12/2/2025

| Tips   |           | Nominal |           | WTD Total Return |         |            | MTD Total Return |         |            | QTD Total Return |         |            | YTD Total Return |         |            |
|--------|-----------|---------|-----------|------------------|---------|------------|------------------|---------|------------|------------------|---------|------------|------------------|---------|------------|
| Coupon | Mat.Date  | Coupon  | Mat.Date  | Tips             | Nominal | Net Return | Tips             | Nominal | Net Return | Tips             | Nominal | Net Return | Tips             | Nominal | Net Return |
| 2.000  | 15-Jan-26 | 6.000   | 15-Feb-26 | 0.05             | 0.06    | -0.01      | 0.05             | 0.06    | -0.01      | 0.68             | 0.73    | -0.05      | 4.73             | 3.99    | 0.74       |
| 0.125  | 15-Apr-26 | 0.750   | 30-Apr-26 | 0.07             | 0.05    | 0.02       | 0.07             | 0.05    | 0.02       | 0.52             | 0.67    | -0.15      | 4.96             | 4.14    | 0.82       |
| 0.125  | 15-Jul-26 | 1.625   | 15-May-26 | 0.06             | 0.03    | 0.03       | 0.06             | 0.03    | 0.03       | 0.40             | 0.68    | -0.28      | 4.97             | 4.20    | 0.77       |
| 0.125  | 15-Oct-26 | 1.125   | 31-Oct-26 | 0.06             | 0.04    | 0.02       | 0.06             | 0.04    | 0.02       | 0.32             | 0.67    | -0.35      | 5.12             | 4.48    | 0.64       |
| 2.375  | 15-Jan-27 | 6.625   | 15-Feb-27 | 0.07             | 0.15    | -0.08      | 0.07             | 0.15    | -0.08      | 0.30             | 0.64    | -0.34      | 5.34             | 4.53    | 0.81       |
| 0.375  | 15-Jan-27 | 2.000   | 15-Nov-26 | 0.05             | 0.04    | 0.01       | 0.05             | 0.04    | 0.01       | 0.26             | 0.68    | -0.42      | 5.36             | 4.53    | 0.83       |
| 0.125  | 15-Apr-27 | 2.750   | 30-Apr-27 | 0.04             | 0.02    | 0.02       | 0.04             | 0.02    | 0.02       | 0.24             | 0.71    | -0.47      | 5.64             | 4.87    | 0.77       |
| 0.375  | 15-Jul-27 | 2.250   | 15-Aug-27 | 0.03             | 0.02    | 0.01       | 0.03             | 0.02    | 0.01       | 0.20             | 0.73    | -0.53      | 5.86             | 5.12    | 0.74       |
| 1.625  | 15-Oct-27 | 4.125   | 30-Sep-27 | 0.04             | 0.02    | 0.02       | 0.04             | 0.02    | 0.02       | 0.21             | 0.78    | -0.57      | 6.07             | 5.24    | 0.83       |
| 1.750  | 15-Jan-28 | 6.125   | 15-Nov-27 | 0.04             | 0.16    | -0.12      | 0.04             | 0.16    | -0.12      | 0.24             | 0.85    | -0.61      | 6.37             | 5.34    | 1.03       |
| 0.500  | 15-Jan-28 | 2.750   | 15-Feb-28 | 0.01             | 0.00    | 0.01       | 0.01             | 0.00    | 0.01       | 0.20             | 0.83    | -0.63      | 6.39             | 5.67    | 0.72       |
| 3.625  | 15-Apr-28 | 5.500   | 15-Aug-28 | 0.03             | 0.01    | 0.02       | 0.03             | 0.01    | 0.02       | 0.22             | 0.83    | -0.61      | 6.59             | 5.78    | 0.81       |
| 1.250  | 15-Apr-28 | 3.625   | 31-Mar-28 | 0.01             | -0.01   | 0.02       | 0.01             | -0.01   | 0.02       | 0.22             | 0.81    | -0.59      | 6.63             | 5.75    | 0.88       |
| 0.750  | 15-Jul-28 | 2.875   | 15-Aug-28 | -0.01            | -0.03   | 0.02       | -0.01            | -0.03   | 0.02       | 0.22             | 0.90    | -0.68      | 6.84             | 6.12    | 0.72       |
| 2.375  | 15-Oct-28 | 4.625   | 30-Sep-28 | -0.02            | -0.07   | 0.05       | -0.02            | -0.07   | 0.05       | 0.20             | 0.87    | -0.67      | 6.94             | 6.16    | 0.78       |
| 2.500  | 15-Jan-29 | 5.250   | 15-Feb-29 | -0.02            | 0.00    | -0.02      | -0.02            | 0.00    | -0.02      | 0.16             | 0.88    | -0.72      | 7.14             | 6.26    | 0.88       |
| 0.875  | 15-Jan-29 | 3.125   | 15-Nov-28 | -0.05            | -0.07   | 0.02       | -0.05            | -0.07   | 0.02       | 0.17             | 0.88    | -0.71      | 7.22             | 6.31    | 0.91       |
| 3.875  | 15-Apr-29 | 5.250   | 15-Feb-29 | -0.05            | 0.00    | -0.05      | -0.05            | 0.00    | -0.05      | 0.19             | 0.88    | -0.69      | 7.25             | 6.26    | 0.99       |
| 2.125  | 15-Apr-29 | 4.625   | 30-Apr-29 | -0.06            | -0.09   | 0.03       | -0.06            | -0.09   | 0.03       | 0.23             | 0.92    | -0.69      | 7.33             | 6.57    | 0.76       |
| 0.250  | 15-Jul-29 | 2.375   | 15-May-29 | -0.11            | -0.11   | 0.00       | -0.11            | -0.11   | 0.00       | 0.17             | 0.94    | -0.77      | 7.56             | 6.67    | 0.89       |
| 1.625  | 15-Oct-29 | 4.125   | 31-Oct-29 | -0.12            | -0.13   | 0.01       | -0.12            | -0.13   | 0.01       | 0.24             | 0.96    | -0.72      | 7.63             | 6.88    | 0.75       |
| 0.125  | 15-Jan-30 | 1.750   | 15-Nov-29 | -0.17            | -0.16   | -0.01      | -0.17            | -0.16   | -0.01      | 0.20             | 0.94    | -0.74      | 7.91             | 7.08    | 0.83       |
| 1.625  | 15-Apr-30 | 3.875   | 30-Apr-30 | -0.20            | -0.17   | -0.03      | -0.20            | -0.17   | -0.03      | 0.23             | 1.00    | -0.77      | N/A              | N/A     | N/A        |
| 0.125  | 15-Jul-30 | 0.625   | 15-Aug-30 | -0.21            | -0.20   | -0.01      | -0.21            | -0.20   | -0.01      | 0.19             | 1.04    | -0.85      | 8.26             | 7.82    | 0.44       |
| 1.125  | 15-Oct-30 | 3.625   | 31-Oct-30 | -0.23            | -0.23   | 0.00       | -0.23            | -0.23   | 0.00       | N/A              | N/A     | N/A        | N/A              | N/A     | N/A        |
| 0.125  | 15-Jan-31 | 1.125   | 15-Feb-31 | -0.25            | -0.24   | -0.01      | -0.25            | -0.24   | -0.01      | 0.28             | 1.08    | -0.80      | 8.67             | 8.06    | 0.61       |
| 0.125  | 15-Jul-31 | 1.250   | 15-Aug-31 | -0.28            | -0.26   | -0.02      | -0.28            | -0.26   | -0.02      | 0.28             | 1.16    | -0.88      | 8.95             | 8.36    | 0.59       |
| 0.125  | 15-Jan-32 | 1.875   | 15-Feb-32 | -0.33            | -0.32   | -0.01      | -0.33            | -0.32   | -0.01      | 0.34             | 1.18    | -0.84      | 9.15             | 8.33    | 0.82       |
| 3.375  | 15-Apr-32 | 5.375   | 15-Feb-31 | -0.26            | -0.06   | -0.20      | -0.26            | -0.06   | -0.20      | 0.46             | 1.10    | -0.64      | 8.70             | 7.76    | 0.94       |
| 0.625  | 15-Jul-32 | 2.750   | 15-Aug-32 | -0.30            | -0.33   | 0.03       | -0.30            | -0.33   | 0.03       | 0.44             | 1.19    | -0.75      | 9.35             | 8.34    | 1.01       |
| 1.125  | 15-Jan-33 | 4.125   | 15-Nov-32 | -0.34            | -0.35   | 0.01       | -0.34            | -0.35   | 0.01       | 0.49             | 1.16    | -0.67      | 9.21             | 8.10    | 1.11       |
| 1.375  | 15-Jul-33 | 3.375   | 15-May-33 | -0.34            | -0.37   | 0.03       | -0.34            | -0.37   | 0.03       | 0.52             | 1.19    | -0.67      | 9.33             | 8.55    | 0.78       |
| 1.750  | 15-Jan-34 | 4.000   | 15-Feb-34 | -0.35            | -0.38   | 0.03       | -0.35            | -0.38   | 0.03       | 0.56             | 1.31    | -0.75      | 9.18             | 8.59    | 0.59       |
| 1.875  | 15-Jul-34 | 4.375   | 15-May-34 | -0.39            | -0.43   | 0.04       | -0.39            | -0.43   | 0.04       | 0.57             | 1.29    | -0.72      | 9.17             | 8.55    | 0.62       |
| 2.125  | 15-Jan-35 | 4.250   | 15-Nov-34 | -0.39            | -0.45   | 0.06       | -0.39            | -0.45   | 0.06       | 0.52             | 1.32    | -0.80      | N/A              | N/A     | N/A        |
| 1.875  | 15-Jul-35 | 4.250   | 15-Aug-35 | -0.43            | -0.45   | 0.02       | -0.43            | -0.45   | 0.02       | 0.53             | 1.36    | -0.83      | N/A              | N/A     | N/A        |
| 2.125  | 15-Feb-40 | 4.625   | 15-Feb-40 | -0.65            | -0.68   | 0.03       | -0.65            | -0.68   | 0.03       | 0.15             | 0.89    | -0.74      | 8.67             | 7.73    | 0.94       |
| 2.125  | 15-Feb-41 | 4.750   | 15-Feb-41 | -0.66            | -0.72   | 0.06       | -0.66            | -0.72   | 0.06       | 0.05             | 0.86    | -0.81      | 7.40             | 7.41    | -0.01      |
| 0.750  | 15-Feb-42 | 3.125   | 15-Feb-42 | -0.83            | -0.79   | -0.04      | -0.83            | -0.79   | -0.04      | 0.15             | 0.89    | -0.74      | 6.75             | 7.13    | -0.38      |
| 0.625  | 15-Feb-43 | 3.125   | 15-Feb-43 | -0.92            | -0.90   | -0.02      | -0.92            | -0.90   | -0.02      | 0.05             | 0.84    | -0.79      | 6.73             | 7.09    | -0.36      |
| 1.375  | 15-Feb-44 | 3.625   | 15-Feb-44 | -0.86            | -0.86   | 0.00       | -0.86            | -0.86   | 0.00       | 0.06             | 0.83    | -0.77      | 6.50             | 6.89    | -0.39      |
| 0.750  | 15-Feb-45 | 2.500   | 15-Feb-45 | -0.97            | -0.98   | 0.01       | -0.97            | -0.98   | 0.01       | 0.10             | 0.81    | -0.71      | 6.13             | 6.65    | -0.52      |
| 1.000  | 15-Feb-46 | 2.500   | 15-Feb-46 | -0.97            | -1.07   | 0.10       | -0.97            | -1.07   | 0.10       | 0.20             | 0.73    | -0.53      | 5.95             | 6.61    | -0.66      |
| 0.875  | 15-Feb-47 | 3.000   | 15-Feb-47 | -0.97            | -1.00   | 0.03       | -0.97            | -1.00   | 0.03       | 0.10             | 0.83    | -0.73      | 5.46             | 6.76    | -1.30      |
| 1.000  | 15-Feb-48 | 3.000   | 15-Feb-48 | -0.98            | -1.00   | 0.02       | -0.98            | -1.00   | 0.02       | 0.04             | 0.86    | -0.82      | 5.18             | 6.77    | -1.59      |
| 1.000  | 15-Feb-49 | 3.000   | 15-Feb-49 | -1.03            | -1.01   | -0.02      | -1.03            | -1.01   | -0.02      | 0.08             | 0.76    | -0.68      | 4.70             | 6.66    | -1.96      |
| 0.250  | 15-Feb-50 | 2.000   | 15-Feb-50 | -1.21            | -1.10   | -0.11      | -1.21            | -1.10   | -0.11      | 0.00             | 0.67    | -0.67      | 3.99             | 6.06    | -2.07      |
| 0.125  | 15-Feb-51 | 1.875   | 15-Feb-51 | -1.29            | -1.17   | -0.12      | -1.29            | -1.17   | -0.12      | 0.01             | 0.56    | -0.55      | 3.30             | 5.67    | -2.37      |

|       |           |       |           |       |       |       |       |       |       |      |      |       |      |      |       |
|-------|-----------|-------|-----------|-------|-------|-------|-------|-------|-------|------|------|-------|------|------|-------|
| 0.125 | 15-Feb-52 | 2.250 | 15-Feb-52 | -1.24 | -1.20 | -0.04 | -1.24 | -1.20 | -0.04 | 0.27 | 0.59 | -0.32 | 2.66 | 5.51 | -2.85 |
| 1.500 | 15-Feb-53 | 3.625 | 15-Feb-53 | -0.99 | -1.08 | 0.09  | -0.99 | -1.08 | 0.09  | 0.25 | 0.67 | -0.42 | 3.80 | 5.62 | -1.82 |
| 2.125 | 15-Feb-54 | 4.250 | 15-Feb-54 | -1.01 | -1.04 | 0.03  | -1.01 | -1.04 | 0.03  | 0.19 | 0.70 | -0.51 | 3.91 | 5.23 | -1.32 |
| 2.375 | 15-Feb-55 | 4.625 | 15-Feb-55 | -1.01 | -1.04 | 0.03  | -1.01 | -1.04 | 0.03  | 0.12 | 0.72 | -0.60 | N/A  | N/A  | N/A   |