

# TIPS Daily Report - June 13, 2025

Date  
6/12/2025

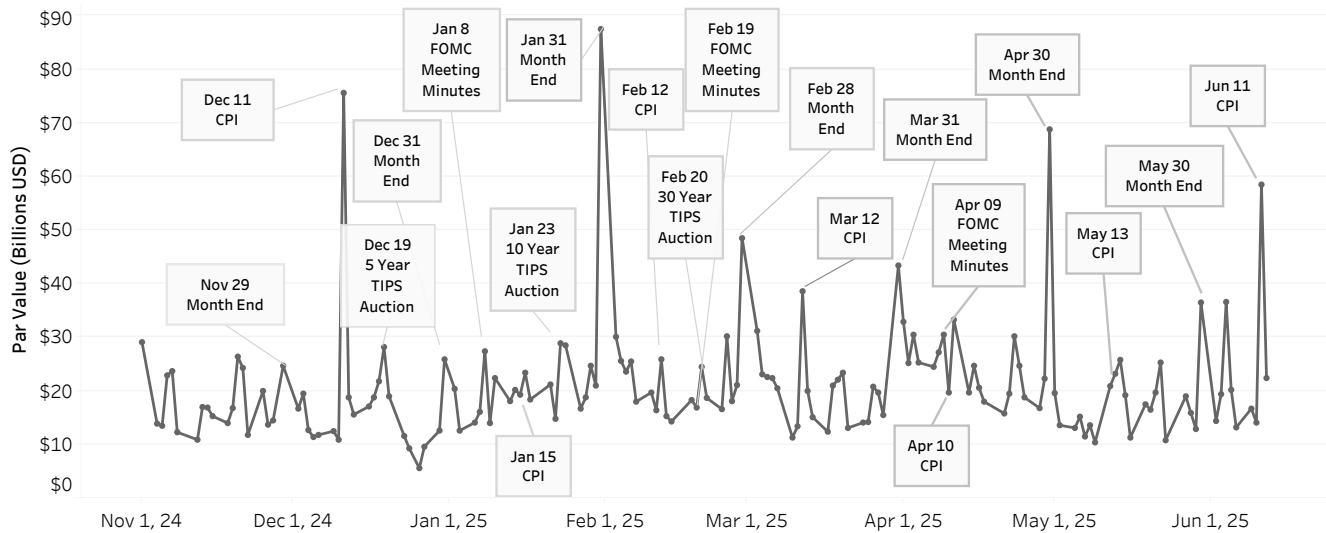
## Total Return Comparison Nominal vs Inflation Indexed

Total Return  
-35.63% 31.52%

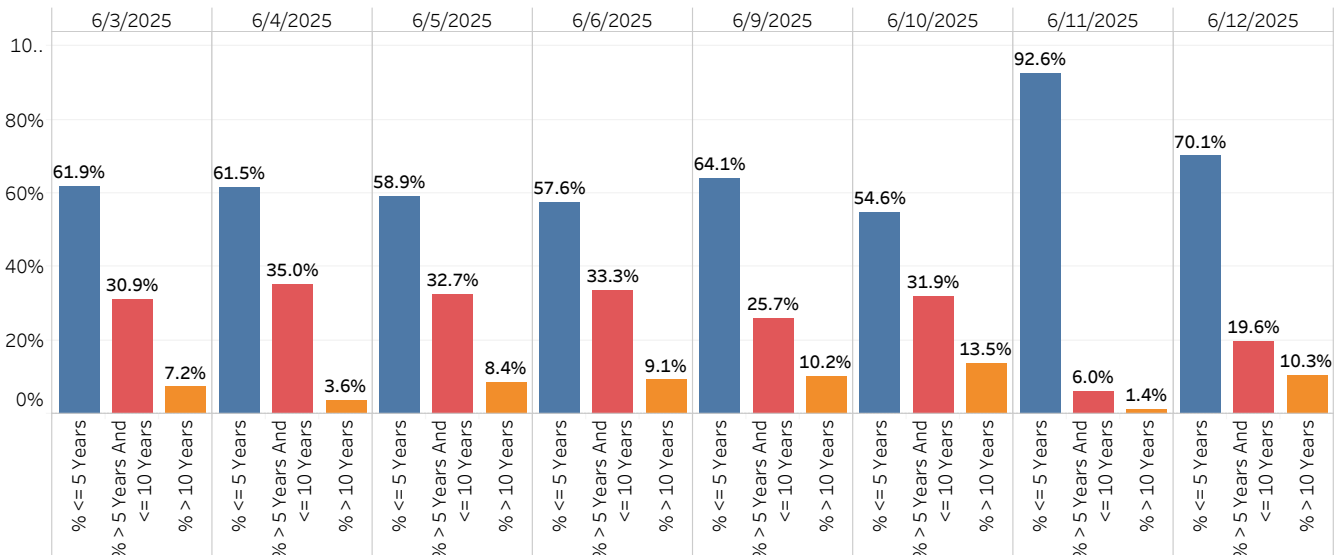
| Maturity  | MTD     |        | YTD     |       | 1 Year  |        | 2 Years |        | 5 Years |         | 10 Years |        |
|-----------|---------|--------|---------|-------|---------|--------|---------|--------|---------|---------|----------|--------|
|           | Nominal | TIPS   | Nominal | TIPS  | Nominal | TIPS   | Nominal | TIPS   | Nominal | TIPS    | Nominal  | TIPS   |
| 1-5 Year  | 0.22%   | -0.18% | 2.80%   | 3.59% | 5.35%   | 6.13%  | 10.15%  | 11.96% | 3.69%   | 16.76%  | 15.33%   | 31.52% |
| 5-10 Year | 0.59%   | 0.05%  | 4.11%   | 4.49% | 4.71%   | 4.96%  | 8.73%   | 9.62%  | -8.14%  | 5.18%   | 11.16%   | 29.88% |
| 10+ Year  | 2.21%   | 1.28%  | 1.88%   | 0.81% | -2.15%  | -3.85% | -2.04%  | -4.22% | -35.63% | -27.22% | -5.11%   | 10.19% |

## TIPS Trading Volume

Total Daily Trading Volume in Billions of US Dollars



## Daily TIPS Volume by Sector



# U.S. Inflation Heatmap

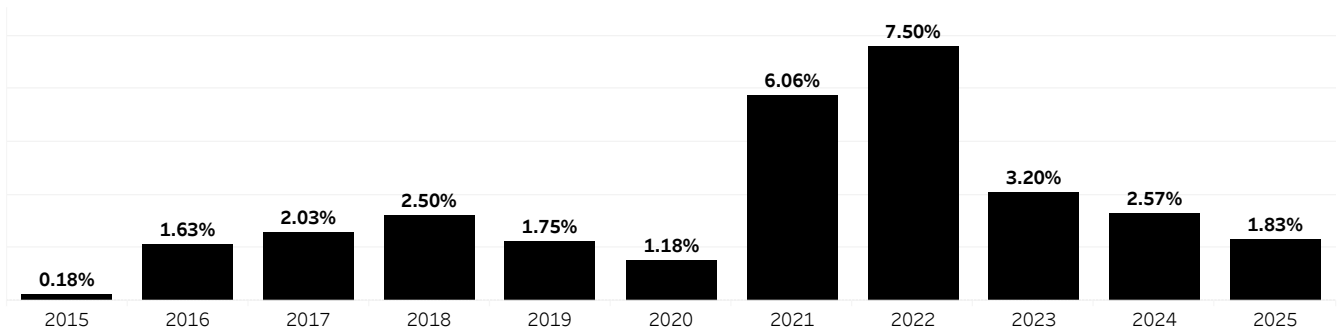
## Consumer Price Index Components

Month-over-Month % Change, Seasonally Adjusted

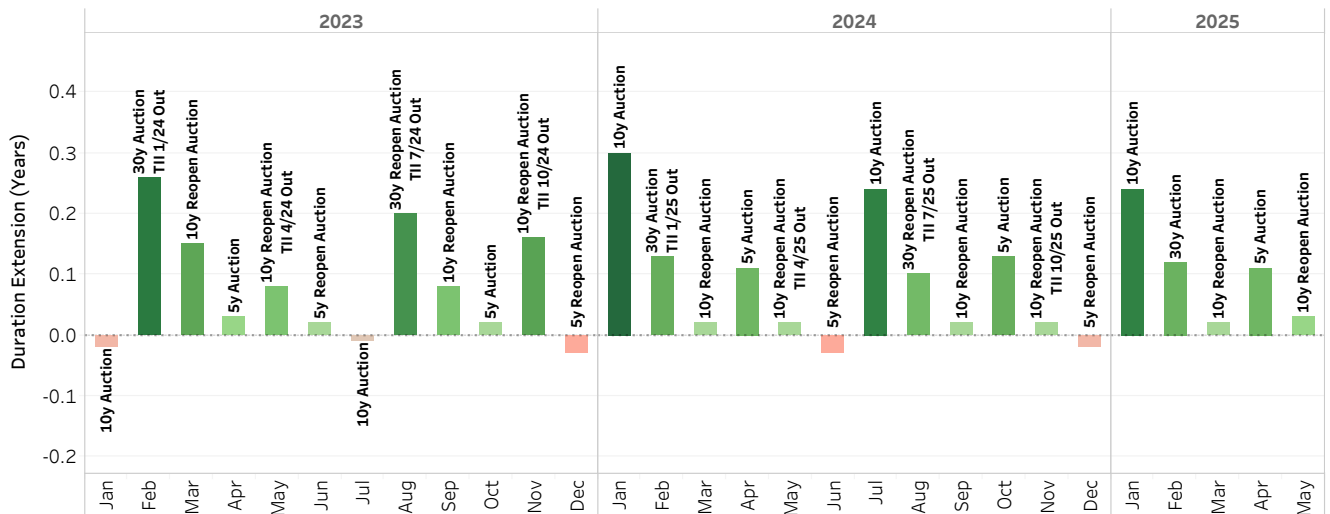
MoM % Change  
-6.25% 4.02%

|                           | 2024   |        |        |        |        |        | 2025   |        |        |        |        |
|---------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|                           | Jul    | Aug    | Sep    | Oct    | Nov    | Dec    | Jan    | Feb    | Mar    | Apr    | May    |
| Headline CPI              | 0.14%  | 0.18%  | 0.23%  | 0.23%  | 0.28%  | 0.36%  | 0.47%  | 0.22%  | -0.05% | 0.22%  | 0.08%  |
| Core CPI                  | 0.19%  | 0.28%  | 0.31%  | 0.27%  | 0.29%  | 0.21%  | 0.45%  | 0.23%  | 0.06%  | 0.24%  | 0.13%  |
| Core Services Ex-Housing  | 0.21%  | 0.33%  | 0.40%  | 0.31%  | 0.34%  | 0.21%  | 0.76%  | 0.22%  | -0.24% | 0.21%  | 0.06%  |
| Energy                    | -0.43% | -0.99% | -0.95% | -0.22% | 0.09%  | 2.42%  | 1.08%  | 0.20%  | -2.39% | 0.67%  | -0.98% |
| Gasoline                  | -0.90% | -1.18% | -2.33% | -0.98% | 0.29%  | 4.02%  | 1.75%  | -0.96% | -6.25% | -0.09% | -2.65% |
| Electricity               | 0.16%  | -0.41% | 0.54%  | 0.79%  | -0.23% | 0.20%  | -0.04% | 1.02%  | 0.94%  | 0.85%  | 0.90%  |
| Utility Gas               | -0.53% | -1.61% | 0.67%  | 0.50%  | 0.48%  | 2.82%  | 1.79%  | 2.54%  | 3.57%  | 3.70%  | -0.96% |
| Food                      | 0.15%  | 0.15%  | 0.32%  | 0.21%  | 0.32%  | 0.29%  | 0.36%  | 0.16%  | 0.44%  | -0.08% | 0.29%  |
| Food At Home              | 0.11%  | 0.08%  | 0.31%  | 0.19%  | 0.35%  | 0.28%  | 0.46%  | 0.01%  | 0.49%  | -0.44% | 0.27%  |
| Food Away From Home       | 0.21%  | 0.26%  | 0.34%  | 0.24%  | 0.28%  | 0.30%  | 0.24%  | 0.39%  | 0.36%  | 0.44%  | 0.31%  |
| Core Goods                | -0.23% | -0.12% | 0.17%  | 0.02%  | 0.21%  | -0.04% | 0.28%  | 0.22%  | -0.09% | 0.06%  | -0.04% |
| Apparel                   | -0.27% | 0.10%  | 0.99%  | -0.89% | 0.08%  | 0.13%  | -1.38% | 0.60%  | 0.37%  | -0.20% | -0.42% |
| New Vehicles              | -0.14% | 0.03%  | 0.13%  | -0.02% | 0.47%  | 0.36%  | 0.04%  | -0.07% | 0.10%  | -0.01% | -0.29% |
| Used Cars and Trucks      | -1.44% | -0.16% | 0.50%  | 1.21%  | 1.29%  | 0.76%  | 2.19%  | 0.88%  | -0.69% | -0.53% | -0.54% |
| Core Services             | 0.32%  | 0.38%  | 0.36%  | 0.34%  | 0.29%  | 0.26%  | 0.51%  | 0.25%  | 0.11%  | 0.29%  | 0.17%  |
| Shelter                   | 0.36%  | 0.48%  | 0.27%  | 0.39%  | 0.34%  | 0.27%  | 0.37%  | 0.28%  | 0.22%  | 0.33%  | 0.25%  |
| Rent of Primary Residence | 0.47%  | 0.35%  | 0.29%  | 0.30%  | 0.25%  | 0.30%  | 0.35%  | 0.28%  | 0.33%  | 0.34%  | 0.21%  |
| OER                       | 0.36%  | 0.47%  | 0.34%  | 0.41%  | 0.25%  | 0.31%  | 0.31%  | 0.28%  | 0.40%  | 0.36%  | 0.27%  |

## Annual TIPS Inflation Accrual



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



US TIPS Report

6/13/2025

| 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   | 0.375  | 15-Jul-25 | 99.877        | 0.569     | 0.14         | 0.61    | 2.14    | 356.3      | 17.0   | -10.6  | -4.8   | 512.2   | 339.3  | 399.3  | 526.9   | 146.0  | 302.4  | 15-Aug-25 |
| TIPS   | 0.125  | 15-Oct-25 | 99.626        | 0.907     | 0.08         | 0.40    | 2.37    | 331.7      | 29.2   | -7.7   | -64.5  | 467.0   | 302.5  | 390.3  | 467.0   | 160.3  | 289.9  | 31-Oct-25 |
| TIPS   | 0.625  | 15-Jan-26 | 99.404        | 1.480     | 0.06         | 0.45    | 2.59    | 272.5      | 12.1   | -9.7   | -63.9  | 385.2   | 260.4  | 323.0  | 385.2   | 154.6  | 250.7  | 15-Nov-25 |
| TIPS   | 2.000  | 15-Jan-26 | 100.183       | 1.483     | 0.06         | 0.45    | 2.59    | 204.1      | 10.1   | -15.4  | -56.9  | 294.6   | 194.0  | 249.2  | 294.6   | 91.8   | 190.4  | 15-Feb-26 |
| TIPS   | 0.125  | 15-Apr-26 | 98.771        | 1.483     | 0.03         | 0.32    | 2.77    | 265.6      | 9.0    | -13.9  | -49.4  | 350.8   | 256.6  | 305.5  | 350.8   | 147.1  | 240.2  | 30-Apr-26 |
| TIPS   | 0.125  | 15-Jul-26 | 98.946        | 1.000     | -0.01        | 0.28    | 2.89    | 312.5      | 7.1    | -7.3   | -41.7  | 374.6   | 305.4  | 341.3  | 374.6   | 190.1  | 276.3  | 15-May-26 |
| TIPS   | 0.125  | 15-Oct-26 | 98.565        | 1.133     | -0.06        | 0.21    | 2.94    | 292.3      | 6.3    | -9.1   | -33.5  | 342.4   | 286.0  | 317.2  | 342.4   | 183.0  | 264.9  | 31-Oct-26 |
| TIPS   | 2.375  | 15-Jan-27 | 101.412       | 1.387     | -0.09        | 0.22    | 3.05    | 213.4      | 1.2    | -8.2   | -37.0  | 267.0   | 212.2  | 240.6  | 267.0   | 136.4  | 204.9  | 15-Feb-27 |
| TIPS   | 0.375  | 15-Jan-27 | 98.320        | 1.398     | -0.10        | 0.30    | 3.12    | 264.6      | 4.8    | -6.8   | -30.0  | 308.3   | 259.8  | 287.1  | 308.3   | 173.3  | 244.6  | 15-Nov-26 |
| TIPS   | 0.125  | 15-Apr-27 | 97.481        | 1.475     | -0.17        | 0.21    | 3.27    | 248.6      | 6.1    | -8.4   | -31.0  | 290.5   | 242.5  | 270.6  | 290.5   | 170.8  | 235.4  | 30-Apr-27 |
| TIPS   | 0.375  | 15-Jul-27 | 98.183        | 1.222     | -0.19        | 0.26    | 3.41    | 271.3      | 6.4    | -6.9   | -24.8  | 306.1   | 264.9  | 288.1  | 306.1   | 192.9  | 255.2  | 15-Aug-27 |
| TIPS   | 1.625  | 15-Oct-27 | 100.710       | 1.270     | -0.20        | 0.26    | 3.53    | 264.6      | 5.5    | -5.1   | -20.1  | 295.6   | 259.1  | 277.5  | 295.6   | 190.0  | 249.4  | 30-Sep-27 |
| TIPS   | 1.750  | 15-Jan-28 | 100.664       | 1.437     | -0.22        | 0.24    | 3.66    | 233.2      | 3.8    | -3.4   | -20.9  | 267.3   | 227.7  | 245.6  | 267.3   | 172.6  | 223.7  | 15-Nov-27 |
| TIPS   | 0.500  | 15-Jan-28 | 97.511        | 1.450     | -0.19        | 0.23    | 3.70    | 248.0      | 4.9    | -4.9   | -19.7  | 277.6   | 243.1  | 260.4  | 277.6   | 184.0  | 237.5  | 15-Feb-28 |
| TIPS   | 3.625  | 15-Apr-28 | 105.732       | 1.494     | -0.23        | 0.21    | 3.78    | 228.2      | 5.3    | -5.5   | -17.8  | 258.9   | 220.6  | 238.0  | 258.9   | 165.0  | 217.0  | 15-Aug-28 |
| TIPS   | 1.250  | 15-Apr-28 | 99.160        | 1.524     | -0.23        | 0.27    | 3.82    | 239.0      | 5.4    | -5.0   | -16.9  | 268.2   | 233.6  | 250.4  | 268.2   | 180.5  | 231.1  | 31-Mar-28 |
| TIPS   | 0.750  | 15-Jul-28 | 98.038        | 1.376     | -0.27        | 0.22    | 3.89    | 256.0      | 4.7    | -5.5   | -15.0  | 283.0   | 251.3  | 265.9  | 283.0   | 198.8  | 247.8  | 15-Aug-28 |
| TIPS   | 2.375  | 15-Oct-28 | 103.015       | 1.425     | -0.28        | 0.17    | 3.95    | 251.1      | 4.7    | -4.4   | -14.7  | 277.5   | 245.5  | 260.2  | 277.5   | 195.8  | 243.4  | 30-Sep-28 |
| TIPS   | 2.500  | 15-Jan-29 | 103.191       | 1.547     | -0.28        | 0.15    | 3.99    | 223.7      | 3.4    | -4.0   | -14.5  | 250.4   | 213.1  | 231.3  | 251.6   | 173.1  | 218.2  | 15-Feb-29 |
| TIPS   | 0.875  | 15-Jan-29 | 97.549        | 1.550     | -0.34        | 0.14    | 4.03    | 239.7      | 3.8    | -4.7   | -14.5  | 264.8   | 232.0  | 247.6  | 265.8   | 192.6  | 235.0  | 15-Nov-28 |
| TIPS   | 3.875  | 15-Apr-29 | 108.366       | 1.579     | -0.33        | 0.21    | 4.11    | 220.5      | 3.6    | -2.6   | -11.4  | 244.2   | 206.6  | 226.0  | 247.2   | 171.2  | 213.8  | 15-Feb-29 |
| TIPS   | 2.125  | 15-Apr-29 | 101.824       | 1.610     | -0.36        | 0.13    | 4.09    | 236.1      | 4.1    | -4.1   | -12.4  | 258.9   | 227.9  | 243.2  | 261.2   | 187.7  | 230.0  | 30-Apr-29 |
| TIPS   | 0.250  | 15-Jul-29 | 95.053        | 1.476     | -0.31        | 0.14    | 4.22    | 249.1      | 2.9    | -3.8   | -9.6   | 270.3   | 237.6  | 253.9  | 273.2   | 202.2  | 242.7  | 15-May-29 |
| TIPS   | 1.625  | 15-Oct-29 | 100.305       | 1.531     | -0.34        | 0.07    | 4.22    | 246.5      | 3.2    | -4.4   | -9.2   | 267.7   | 234.7  | 251.6  | 270.1   | 234.6  | 252.2  | 31-Oct-29 |
| TIPS   | 0.125  | 15-Jan-30 | 93.298        | 1.619     | -0.37        | 0.05    | 4.29    | 233.4      | 3.4    | -3.5   | -7.7   | 253.9   | 221.2  | 237.7  | 258.4   | 193.9  | 229.7  | 15-Nov-29 |
| TIPS   | 1.625  | 15-Apr-30 | 99.648        | 1.682     | -0.39        | N/A     | N/A     | 233.8      | 3.5    | -3.1   | N/A    | 244.7   | 230.3  | 239.3  | 244.7   | 230.3  | 239.3  | 30-Apr-30 |
| TIPS   | 0.125  | 15-Jul-30 | 92.771        | 1.584     | -0.42        | -0.05   | 4.45    | 245.8      | 2.9    | -3.5   | -7.0   | 264.8   | 232.8  | 249.5  | 268.3   | 205.0  | 241.2  | 15-Aug-30 |
| TIPS   | 0.125  | 15-Jan-31 | 91.389        | 1.725     | -0.41        | -0.11   | 4.51    | 231.5      | 3.4    | -3.0   | -4.1   | 251.0   | 218.2  | 234.9  | 255.9   | 195.3  | 229.0  | 15-Feb-31 |
| TIPS   | 0.125  | 15-Jul-31 | 90.702        | 1.723     | -0.44        | -0.28   | 4.56    | 242.5      | 2.9    | -3.2   | -4.1   | 259.8   | 229.5  | 245.4  | 264.7   | 204.3  | 238.9  | 15-Aug-31 |
| TIPS   | 0.125  | 15-Jan-32 | 89.259        | 1.850     | -0.43        | -0.41   | 4.51    | 234.6      | 2.7    | -3.4   | -3.3   | 250.4   | 220.9  | 236.8  | 256.4   | 200.3  | 232.3  | 15-Feb-32 |
| TIPS   | 3.375  | 15-Apr-32 | 109.854       | 1.795     | -0.36        | -0.03   | 4.43    | 223.6      | 2.5    | -3.1   | -1.7   | 240.2   | 207.2  | 224.3  | 246.9   | 181.5  | 218.9  | 15-Feb-31 |
| TIPS   | 0.625  | 15-Jul-32 | 91.854        | 1.841     | -0.42        | -0.52   | 4.54    | 238.8      | 2.8    | -2.8   | -1.9   | 252.9   | 225.0  | 240.0  | 260.3   | 203.6  | 235.4  | 15-Aug-32 |
| TIPS   | 1.125  | 15-Jan-33 | 94.076        | 1.956     | -0.39        | -0.59   | 4.25    | 226.9      | 2.7    | -3.0   | -3.3   | 241.1   | 214.2  | 229.0  | 250.2   | 195.8  | 226.3  | 15-Nov-32 |
| TIPS   | 1.375  | 15-Jul-33 | 95.587        | 1.953     | -0.35        | -0.77   | 4.29    | 232.9      | 2.5    | -2.5   | -2.7   | 247.3   | 222.5  | 235.0  | 255.6   | 202.2  | 231.8  | 15-May-33 |
| TIPS   | 1.750  | 15-Jan-34 | 97.633        | 2.040     | -0.32        | -0.88   | 4.11    | 230.3      | 2.7    | -2.5   | -2.3   | 242.7   | 218.2  | 231.6  | 250.2   | 199.0  | 228.1  | 15-Feb-34 |
| TIPS   | 1.875  | 15-Jul-34 | 98.580        | 2.038     | -0.30        | -0.97   | 4.06    | 232.2      | 2.5    | -2.7   | -2.5   | 243.9   | 221.7  | 233.7  | 252.9   | 202.2  | 230.8  | 15-May-34 |
| TIPS   | 2.125  | 15-Jan-35 | 100.061       | 2.110     | -0.28        | -1.14   | N/A     | 229.0      | 2.5    | -2.2   | -1.9   | 239.6   | 217.9  | 230.0  | 247.8   | 217.9  | 233.1  | 15-Nov-34 |
| TIPS   | 2.125  | 15-Feb-40 | 96.961        | 2.328     | -0.18        | -2.49   | 3.05    | 238.9      | 4.3    | -0.9   | 0.0    | 249.6   | 227.8  | 238.7  | 250.9   | 201.4  | 232.4  | 15-Feb-40 |
| TIPS   | 2.125  | 15-Feb-41 | 95.877        | 2.408     | -0.23        | -3.40   | 1.68    | 236.7      | 3.3    | -3.9   | -3.6   | 250.7   | 229.9  | 239.6  | 253.4   | 205.1  | 235.0  | 15-Feb-41 |
| TIPS   | 0.750  | 15-Feb-42 | 75.916        | 2.487     | -0.26        | -4.06   | 1.09    | 238.3      | 4.5    | -1.6   | -1.8   | 249.6   | 228.4  | 238.8  | 253.7   | 210.9  | 236.5  | 15-Feb-42 |
| TIPS   | 0.625  | 15-Feb-43 | 72.702        | 2.528     | -0.34        | -4.17   | 1.23    | 239.2      | 3.3    | -2.1   | -0.6   | 249.9   | 229.6  | 239.5  | 253.8   | 214.3  | 238.6  | 15-Feb-43 |
| TIPS   | 1.375  | 15-Feb-44 | 82.267        | 2.544     | -0.35        | -4.00   | 1.25    | 239.8      | 3.3    | -2.5   | 1.7    | 248.4   | 228.0  | 238.8  | 253.3   | 216.6  | 238.4  | 15-Feb-44 |
| TIPS   | 0.750  | 15-Feb-45 | 71.488        | 2.588     | -0.39        | -4.50   | 0.74    | 240.5      | 2.9    | -3.2   | 1.4    | 249.9   | 228.8  | 239.6  | 252.8   | 216.9  | 239.0  | 15-Feb-45 |
| TIPS   | 1.000  | 15-Feb-46 | 74.175        | 2.604     | -0.41        | -4.57   | 0.74    | 240.7      | 2.7    | -2.5   | 2.1    | 248.6   | 228.9  | 239.4  | 251.1   | 216.4  | 238.3  | 15-Feb-46 |
| TIPS   | 0.875  | 15-Feb-47 | 70.809        | 2.632     | -0.41        | -5.10   | 0.06    | 238.1      | 2.5    | -2.5   | 1.7    | 245.9   | 228.0  | 237.7  | 252.1   | 216.3  | 238.2  | 15-Feb-47 |
| TIPS   | 1.000  | 15-Feb-48 | 71.847        | 2.639     | -0.42        | -5.14   | -0.18   | 238.9      | 2.3    | -2.5   | 1.7    | 246.9   | 228.3  | 238.3  | 252.5   | 218.3  | 239.0  | 15-Feb-48 |
| TIPS   | 1.000  | 15-Feb-49 | 70.839        | 2.648     | -0.39        | -5.42   | -0.56   | 238.2      | 2.1    | -2.1   | 1.6    | 245.3   | 227.3  | 237.8  | 251.8   | 218.5  | 238.7  | 15-Feb-49 |
| TIPS   | 0.250  | 15-Feb-50 | 56.458        | 2.648     | -0.35        | -6.17   | -1.38   | 238.9      | 2.7    | -1.6   | 2.0    | 245.9   | 227.6  | 237.8  | 251.7   | 219.2  | 238.3  | 15-Feb-50 |
| TIPS   | 0.125  | 15-Feb-51 | 52.877        | 2.641     | -0.34        | -6.73   | -2.15   | 238.1      | 2.9    | -1.5   | 2.0    | 244.2   | 226.4  | 236.9  | 251.3   | 219.4  | 237.9  | 15-Feb-51 |
| TIPS   | 0.125  | 15-Feb-52 | 51.908        | 2.628     | -0.47        | -7.07   | -2.57   | 237.4      | 2.8    | -2.0   | 1.4    | 244.5   | 225.6  | 236.7  | 251.1   | 217.4  | 237.2  | 15-Feb-52 |

|      |       |           |        |       |       |       |       |       |     |      |     |       |       |       |       |       |       |           |
|------|-------|-----------|--------|-------|-------|-------|-------|-------|-----|------|-----|-------|-------|-------|-------|-------|-------|-----------|
| TIPS | 1.500 | 15-Feb-53 | 77.282 | 2.646 | -0.21 | -5.67 | -1.20 | 231.9 | 2.7 | -1.6 | 2.0 | 238.0 | 218.9 | 230.3 | 242.8 | 208.9 | 229.9 | 15-Feb-53 |
| TIPS | 2.125 | 15-Feb-54 | 89.397 | 2.643 | -0.15 | -5.32 | -0.91 | 230.4 | 2.6 | -1.5 | 2.7 | 236.2 | 216.0 | 228.2 | 240.2 | 206.1 | 227.3 | 15-Feb-54 |
| TIPS | 2.375 | 15-Feb-55 | 94.420 | 2.640 | -0.15 | -5.20 | N/A   | 227.8 | 2.6 | -1.4 | 2.6 | 233.9 | 213.0 | 225.4 | 233.9 | 213.0 | 225.4 | 15-Feb-55 |

US TIPS Total Return Performance vs. Nominal

6/13/2025

| 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 |
| 0.375  | 15-Jul-25 | 2.000   | 15-Aug-25 | 0.06             | 0.07    | -0.01      | 0.14             | 0.16    | -0.02      | 0.61             | 0.86    | -0.25      | 2.14             | 1.90    | 0.24       |
| 0.125  | 15-Oct-25 | 0.250   | 31-Oct-25 | 0.04             | 0.09    | -0.05      | 0.08             | 0.18    | -0.10      | 0.40             | 0.82    | -0.42      | 2.37             | 1.91    | 0.46       |
| 0.625  | 15-Jan-26 | 2.250   | 15-Nov-25 | 0.02             | 0.07    | -0.05      | 0.06             | 0.16    | -0.10      | 0.45             | 0.78    | -0.33      | 2.59             | 1.91    | 0.68       |
| 2.000  | 15-Jan-26 | 6.000   | 15-Feb-26 | 0.02             | 0.08    | -0.06      | 0.06             | 0.12    | -0.06      | 0.45             | 0.78    | -0.33      | 2.59             | 1.99    | 0.60       |
| 0.125  | 15-Apr-26 | 0.750   | 30-Apr-26 | 0.01             | 0.15    | -0.14      | 0.03             | 0.20    | -0.17      | 0.32             | 0.75    | -0.43      | 2.77             | 2.00    | 0.77       |
| 0.125  | 15-Jul-26 | 1.625   | 15-May-26 | 0.02             | 0.12    | -0.10      | -0.01            | 0.17    | -0.18      | 0.28             | 0.72    | -0.44      | 2.89             | 2.02    | 0.87       |
| 0.125  | 15-Oct-26 | 1.125   | 31-Oct-26 | 0.04             | 0.20    | -0.16      | -0.06            | 0.12    | -0.18      | 0.21             | 0.68    | -0.47      | 2.94             | 2.17    | 0.77       |
| 2.375  | 15-Jan-27 | 6.625   | 15-Feb-27 | 0.09             | 0.19    | -0.10      | -0.09            | 0.08    | -0.17      | 0.22             | 0.64    | -0.42      | 3.05             | 2.24    | 0.81       |
| 0.375  | 15-Jan-27 | 2.000   | 15-Nov-26 | 0.10             | 0.18    | -0.08      | -0.10            | 0.12    | -0.22      | 0.30             | 0.69    | -0.39      | 3.12             | 2.22    | 0.90       |
| 0.125  | 15-Apr-27 | 2.750   | 30-Apr-27 | 0.08             | 0.22    | -0.14      | -0.17            | 0.08    | -0.25      | 0.21             | 0.69    | -0.48      | 3.27             | 2.42    | 0.85       |
| 0.375  | 15-Jul-27 | 2.250   | 15-Aug-27 | 0.12             | 0.25    | -0.13      | -0.19            | 0.06    | -0.25      | 0.26             | 0.71    | -0.45      | 3.41             | 2.56    | 0.85       |
| 1.625  | 15-Oct-27 | 4.125   | 30-Sep-27 | 0.17             | 0.27    | -0.10      | -0.20            | 0.06    | -0.26      | 0.26             | 0.72    | -0.46      | 3.53             | 2.65    | 0.88       |
| 1.750  | 15-Jan-28 | 6.125   | 15-Nov-27 | 0.20             | 0.33    | -0.13      | -0.22            | 0.04    | -0.26      | 0.24             | 0.64    | -0.40      | 3.66             | 2.61    | 1.05       |
| 0.500  | 15-Jan-28 | 2.750   | 15-Feb-28 | 0.20             | 0.30    | -0.10      | -0.19            | 0.01    | -0.20      | 0.23             | 0.72    | -0.49      | 3.70             | 2.84    | 0.86       |
| 3.625  | 15-Apr-28 | 5.500   | 15-Aug-28 | 0.22             | 0.36    | -0.14      | -0.23            | 0.00    | -0.23      | 0.21             | 0.61    | -0.40      | 3.78             | 2.90    | 0.88       |
| 1.250  | 15-Apr-28 | 3.625   | 31-Mar-28 | 0.21             | 0.35    | -0.14      | -0.23            | 0.02    | -0.25      | 0.27             | 0.73    | -0.46      | 3.82             | 2.94    | 0.88       |
| 0.750  | 15-Jul-28 | 2.875   | 15-Aug-28 | 0.25             | 0.36    | -0.11      | -0.27            | 0.01    | -0.28      | 0.22             | 0.73    | -0.51      | 3.89             | 3.08    | 0.81       |
| 2.375  | 15-Oct-28 | 4.625   | 30-Sep-28 | 0.29             | 0.39    | -0.10      | -0.28            | 0.01    | -0.29      | 0.17             | 0.74    | -0.57      | 3.95             | 3.15    | 0.80       |
| 2.500  | 15-Jan-29 | 5.250   | 15-Feb-29 | 0.29             | 0.46    | -0.17      | -0.28            | 0.05    | -0.33      | 0.15             | 0.68    | -0.53      | 3.99             | 3.17    | 0.82       |
| 0.875  | 15-Jan-29 | 3.125   | 15-Nov-28 | 0.28             | 0.38    | -0.10      | -0.34            | 0.00    | -0.34      | 0.14             | 0.74    | -0.60      | 4.03             | 3.21    | 0.82       |
| 3.875  | 15-Apr-29 | 5.250   | 15-Feb-29 | 0.32             | 0.46    | -0.14      | -0.33            | 0.05    | -0.38      | 0.21             | 0.68    | -0.47      | 4.11             | 3.17    | 0.94       |
| 2.125  | 15-Apr-29 | 4.625   | 30-Apr-29 | 0.32             | 0.47    | -0.15      | -0.36            | 0.00    | -0.36      | 0.13             | 0.69    | -0.56      | 4.09             | 3.32    | 0.77       |
| 0.250  | 15-Jul-29 | 2.375   | 15-May-29 | 0.38             | 0.47    | -0.09      | -0.31            | -0.03   | -0.28      | 0.14             | 0.68    | -0.54      | 4.22             | 3.36    | 0.86       |
| 1.625  | 15-Oct-29 | 4.125   | 31-Oct-29 | 0.37             | 0.51    | -0.14      | -0.34            | -0.02   | -0.32      | 0.07             | 0.66    | -0.59      | 4.22             | 3.47    | 0.75       |
| 0.125  | 15-Jan-30 | 1.750   | 15-Nov-29 | 0.44             | 0.57    | -0.13      | -0.37            | -0.03   | -0.34      | 0.05             | 0.72    | -0.67      | 4.29             | 3.61    | 0.68       |
| 1.625  | 15-Apr-30 | 3.875   | 30-Apr-30 | 0.43             | 0.55    | -0.12      | -0.39            | -0.04   | -0.35      | N/A              | N/A     | N/A        | N/A              | N/A     | N/A        |
| 0.125  | 15-Jul-30 | 0.625   | 15-Aug-30 | 0.48             | 0.66    | -0.18      | -0.42            | -0.02   | -0.40      | -0.05            | 0.65    | -0.70      | 4.45             | 3.92    | 0.53       |
| 0.125  | 15-Jan-31 | 1.125   | 15-Feb-31 | 0.49             | 0.69    | -0.20      | -0.41            | 0.00    | -0.41      | -0.11            | 0.66    | -0.77      | 4.51             | 3.96    | 0.55       |
| 0.125  | 15-Jul-31 | 1.250   | 15-Aug-31 | 0.55             | 0.72    | -0.17      | -0.44            | 0.00    | -0.44      | -0.28            | 0.41    | -0.69      | 4.56             | 3.97    | 0.59       |
| 0.125  | 15-Jan-32 | 1.875   | 15-Feb-32 | 0.60             | 0.75    | -0.15      | -0.43            | 0.01    | -0.44      | -0.41            | 0.30    | -0.71      | 4.51             | 3.84    | 0.67       |
| 3.375  | 15-Apr-32 | 5.375   | 15-Feb-31 | 0.53             | 0.62    | -0.09      | -0.36            | -0.04   | -0.32      | -0.03            | 0.56    | -0.59      | 4.43             | 3.75    | 0.68       |
| 0.625  | 15-Jul-32 | 2.750   | 15-Aug-32 | 0.61             | 0.71    | -0.10      | -0.42            | 0.01    | -0.43      | -0.52            | 0.17    | -0.69      | 4.54             | 3.80    | 0.74       |
| 1.125  | 15-Jan-33 | 4.125   | 15-Nov-32 | 0.63             | 0.75    | -0.12      | -0.39            | 0.04    | -0.43      | -0.59            | 0.18    | -0.77      | 4.25             | 3.69    | 0.56       |
| 1.375  | 15-Jul-33 | 3.375   | 15-May-33 | 0.64             | 0.74    | -0.10      | -0.35            | 0.03    | -0.38      | -0.77            | 0.08    | -0.85      | 4.29             | 3.81    | 0.48       |
| 1.750  | 15-Jan-34 | 4.000   | 15-Feb-34 | 0.63             | 0.76    | -0.13      | -0.32            | 0.10    | -0.42      | -0.88            | -0.15   | -0.73      | 4.11             | 3.64    | 0.47       |
| 1.875  | 15-Jul-34 | 4.375   | 15-May-34 | 0.64             | 0.77    | -0.13      | -0.30            | 0.11    | -0.41      | -0.97            | -0.19   | -0.78      | 4.06             | 3.57    | 0.49       |
| 2.125  | 15-Jan-35 | 4.250   | 15-Nov-34 | 0.68             | 0.76    | -0.08      | -0.28            | 0.13    | -0.41      | -1.14            | -0.41   | -0.73      | N/A              | N/A     | N/A        |
| 2.125  | 15-Feb-40 | 4.625   | 15-Feb-40 | 0.77             | 0.87    | -0.10      | -0.18            | 0.36    | -0.54      | -2.49            | -2.01   | -0.48      | 3.05             | 2.48    | 0.57       |
| 2.125  | 15-Feb-41 | 4.750   | 15-Feb-41 | 0.66             | 1.01    | -0.35      | -0.23            | 0.56    | -0.79      | -3.40            | -2.17   | -1.23      | 1.68             | 2.15    | -0.47      |
| 0.750  | 15-Feb-42 | 3.125   | 15-Feb-42 | 0.69             | 1.02    | -0.33      | -0.26            | 0.48    | -0.74      | -4.06            | -2.76   | -1.30      | 1.09             | 1.57    | -0.48      |
| 0.625  | 15-Feb-43 | 3.125   | 15-Feb-43 | 0.80             | 0.93    | -0.13      | -0.34            | 0.40    | -0.74      | -4.17            | -2.89   | -1.28      | 1.23             | 1.56    | -0.33      |
| 1.375  | 15-Feb-44 | 3.625   | 15-Feb-44 | 0.60             | 0.88    | -0.28      | -0.35            | 0.47    | -0.82      | -4.00            | -2.92   | -1.08      | 1.25             | 1.43    | -0.18      |
| 0.750  | 15-Feb-45 | 2.500   | 15-Feb-45 | 0.56             | 0.87    | -0.31      | -0.39            | 0.47    | -0.86      | -4.50            | -3.45   | -1.05      | 0.74             | 0.86    | -0.12      |
| 1.000  | 15-Feb-46 | 2.500   | 15-Feb-46 | 0.68             | 0.92    | -0.24      | -0.41            | 0.45    | -0.86      | -4.57            | -3.61   | -0.96      | 0.74             | 0.83    | -0.09      |
| 0.875  | 15-Feb-47 | 3.000   | 15-Feb-47 | 0.66             | 0.94    | -0.28      | -0.41            | 0.40    | -0.81      | -5.10            | -3.45   | -1.65      | 0.06             | 0.95    | -0.89      |
| 1.000  | 15-Feb-48 | 3.000   | 15-Feb-48 | 0.64             | 0.90    | -0.26      | -0.42            | 0.41    | -0.83      | -5.14            | -3.55   | -1.59      | -0.18            | 0.86    | -1.04      |
| 1.000  | 15-Feb-49 | 3.000   | 15-Feb-49 | 0.68             | 0.89    | -0.21      | -0.39            | 0.40    | -0.79      | -5.42            | -3.60   | -1.82      | -0.56            | 0.83    | -1.39      |

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|-------|-----------|-------|-----------|------|------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|
| 0.250 | 15-Feb-50 | 2.000 | 15-Feb-50 | 0.82 | 0.96 | -0.14 | -0.35 | 0.40 | -0.75 | -6.17 | -4.23 | -1.94 | -1.38 | 0.17  | -1.55 |
| 0.125 | 15-Feb-51 | 1.875 | 15-Feb-51 | 0.77 | 0.96 | -0.19 | -0.34 | 0.52 | -0.86 | -6.73 | -4.44 | -2.29 | -2.15 | -0.03 | -2.12 |
| 0.125 | 15-Feb-52 | 2.250 | 15-Feb-52 | 0.82 | 0.97 | -0.15 | -0.47 | 0.53 | -1.00 | -7.07 | -4.32 | -2.75 | -2.57 | 0.00  | -2.57 |
| 1.500 | 15-Feb-53 | 3.625 | 15-Feb-53 | 0.82 | 0.89 | -0.07 | -0.21 | 0.40 | -0.61 | -5.67 | -3.90 | -1.77 | -1.20 | 0.26  | -1.46 |
| 2.125 | 15-Feb-54 | 4.250 | 15-Feb-54 | 0.85 | 0.90 | -0.05 | -0.15 | 0.44 | -0.59 | -5.32 | -3.88 | -1.44 | -0.91 | -0.04 | -0.87 |
| 2.375 | 15-Feb-55 | 4.625 | 15-Feb-55 | 0.86 | 0.86 | 0.00  | -0.15 | 0.45 | -0.60 | -5.20 | -3.93 | -1.27 | N/A   | N/A   | N/A   |