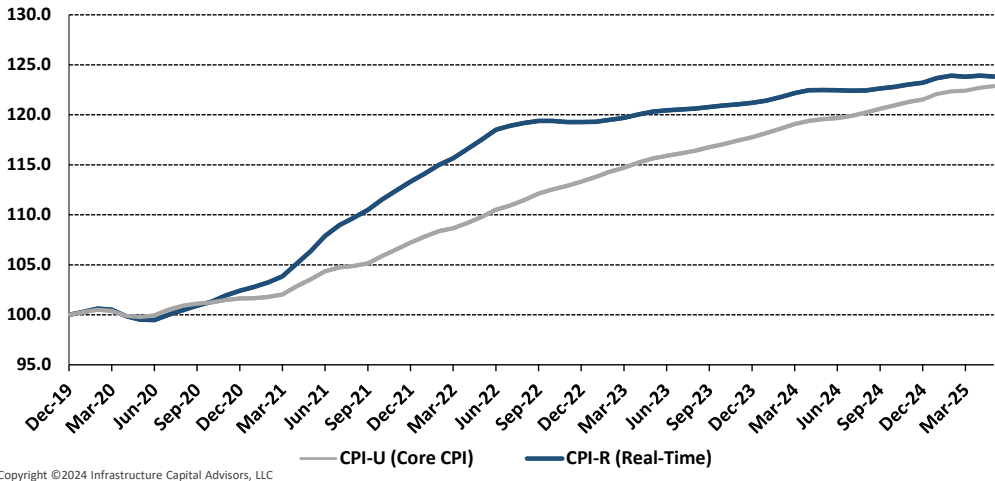




Core CPI (Seasonally Adjusted) vs ICA Adjusted CPI (CPI-R)

The Index: The index uses seasonally adjusted Core-CPI (excluding Food and Energy) while adjusting the methodology for Shelter. Rather than using the highly lagged and subjective owner’s equivalent rent, CPI-R uses a seasonally adjusted average of Apartment List’s "National Rent Report” and Zillow’s "Home Value Index" as a more current inductor of shelter prices.

The Findings: Inflation was considerably higher than reported in 2020/2021 and has recently fallen by more than indicated by traditional Core-CPI. The Federal Reserve was therefore late to recognize inflation, raising interest rates late into the cycle. Subsequently, the fed is now



Date	CPI-U (Core CPI)					CPI-R (Real-Time)			
	Reported	12/31/2019 = 100	MoM % Chg	Annualized MoM %	TTM % Chg	12/31/2019 = 100	MoM % Chg	Annualized MoM %	TTM % Chg
Dec-19	266.0	100.0				100.0			
Jan-20	266.7	100.3	0.26%	3.19%		100.3	0.28%	3.39%	
Feb-20	267.4	100.5	0.25%	2.98%		100.6	0.34%	4.20%	
Mar-20	267.1	100.4	-0.12%	-1.41%		100.5	-0.10%	-1.25%	
Apr-20	265.7	99.9	-0.49%	-5.72%		99.9	-0.64%	-7.40%	
May-20	265.4	99.8	-0.13%	-1.50%		99.5	-0.36%	-4.29%	
Jun-20	265.8	99.9	0.16%	1.99%		99.5	-0.04%	-0.42%	
Jul-20	267.4	100.5	0.58%	7.18%		100.0	0.53%	6.55%	
Aug-20	268.4	100.9	0.39%	4.74%		100.5	0.47%	5.79%	
Sep-20	268.9	101.1	0.19%	2.31%		100.9	0.43%	5.27%	
Oct-20	269.3	101.2	0.14%	1.68%		101.3	0.40%	4.89%	
Nov-20	270.0	101.5	0.25%	3.05%		101.9	0.61%	7.59%	
Dec-20	270.3	101.6	0.13%	1.61%	1.62%	102.4	0.47%	5.77%	2.40%
Jan-21	270.4	101.7	0.03%	0.33%	1.39%	102.8	0.37%	4.54%	2.50%
Feb-21	270.8	101.8	0.13%	1.61%	1.27%	103.2	0.45%	5.57%	2.61%
Mar-21	271.5	102.0	0.25%	3.04%	1.65%	103.8	0.58%	7.20%	3.31%
Apr-21	273.6	102.9	0.80%	10.04%	2.97%	105.1	1.22%	15.60%	5.24%
May-21	275.5	103.5	0.67%	8.33%	3.78%	106.4	1.20%	15.45%	6.90%
Jun-21	277.6	104.4	0.78%	9.78%	4.42%	107.9	1.42%	18.49%	8.46%
Jul-21	278.6	104.7	0.37%	4.55%	4.21%	109.0	1.00%	12.63%	8.96%
Aug-21	279.0	104.9	0.14%	1.66%	3.95%	109.7	0.67%	8.40%	9.18%
Sep-21	279.7	105.2	0.25%	3.08%	4.01%	110.5	0.72%	8.99%	9.50%
Oct-21	281.6	105.9	0.69%	8.56%	4.58%	111.5	0.94%	11.86%	10.09%
Nov-21	283.4	106.5	0.63%	7.77%	4.97%	112.4	0.81%	10.22%	10.31%
Dec-21	285.2	107.2	0.64%	7.94%	5.50%	113.3	0.78%	9.72%	10.65%
Jan-22	286.8	107.8	0.55%	6.84%	6.06%	114.1	0.71%	8.81%	11.02%
Feb-22	288.3	108.4	0.51%	6.27%	6.46%	115.0	0.77%	9.63%	11.37%
Mar-22	289.0	108.7	0.27%	3.33%	6.48%	115.6	0.57%	7.10%	11.36%
Apr-22	290.5	109.2	0.49%	6.10%	6.16%	116.6	0.81%	10.22%	10.92%
May-22	292.0	109.8	0.54%	6.66%	6.02%	117.5	0.79%	9.92%	10.47%
Jun-22	294.0	110.5	0.67%	8.40%	5.91%	118.5	0.84%	10.55%	9.83%
Jul-22	295.1	110.9	0.36%	4.46%	5.90%	118.9	0.33%	4.09%	9.11%
Aug-22	296.6	111.5	0.51%	6.28%	6.29%	119.2	0.26%	3.11%	8.66%
Sep-22	298.3	112.1	0.57%	7.10%	6.63%	119.4	0.17%	2.01%	8.06%
Oct-22	299.4	112.5	0.37%	4.52%	6.30%	119.4	-0.01%	-0.09%	7.05%
Nov-22	300.3	112.9	0.31%	3.81%	5.96%	119.3	-0.09%	-1.10%	6.08%
Dec-22	301.4	113.3	0.37%	4.56%	5.68%	119.3	0.00%	0.03%	5.27%
Jan-23	302.7	113.8	0.42%	5.10%	5.54%	119.3	0.02%	0.24%	4.55%
Feb-23	304.1	114.3	0.47%	5.74%	5.50%	119.5	0.17%	2.01%	3.93%
Mar-23	305.1	114.7	0.34%	4.12%	5.56%	119.7	0.16%	1.99%	3.50%
Apr-23	306.5	115.2	0.45%	5.51%	5.51%	120.0	0.27%	3.34%	2.95%
May-23	307.6	115.6	0.37%	4.53%	5.34%	120.3	0.24%	2.98%	2.39%
Jun-23	308.3	115.9	0.22%	2.64%	4.86%	120.4	0.10%	1.26%	1.64%
Jul-23	309.0	116.1	0.22%	2.63%	4.70%	120.5	0.08%	0.99%	1.39%
Aug-23	309.6	116.4	0.22%	2.70%	4.40%	120.6	0.07%	0.81%	1.20%
Sep-23	310.6	116.8	0.31%	3.82%	4.14%	120.8	0.13%	1.57%	1.16%
Oct-23	311.4	117.1	0.26%	3.20%	4.03%	120.9	0.12%	1.42%	1.29%
Nov-23	312.4	117.4	0.30%	3.68%	4.01%	121.0	0.10%	1.20%	1.48%
Dec-23	313.2	117.7	0.27%	3.34%	3.91%	121.2	0.13%	1.61%	1.61%
Jan-24	314.4	118.2	0.37%	4.53%	3.87%	121.4	0.17%	2.06%	1.77%
Feb-24	315.6	118.6	0.37%	4.54%	3.77%	121.8	0.29%	3.55%	1.89%
Mar-24	316.8	119.1	0.38%	4.69%	3.81%	122.2	0.33%	4.08%	2.07%
Apr-24	317.6	119.4	0.26%	3.21%	3.62%	122.4	0.23%	2.76%	2.02%
May-24	318.1	119.6	0.14%	1.74%	3.39%	122.5	0.03%	0.32%	1.80%
Jun-24	318.3	119.7	0.09%	1.10%	3.26%	122.5	-0.02%	-0.29%	1.67%
Jul-24	318.9	119.9	0.19%	2.25%	3.23%	122.4	-0.03%	-0.42%	1.55%
Aug-24	319.8	120.2	0.28%	3.46%	3.29%	122.4	0.02%	0.27%	1.50%
Sep-24	320.8	120.6	0.31%	3.80%	3.29%	122.6	0.16%	1.93%	1.53%
Oct-24	321.7	120.9	0.27%	3.24%	3.29%	122.8	0.13%	1.57%	1.54%
Nov-24	322.6	121.3	0.29%	3.53%	3.28%	123.0	0.19%	2.35%	1.64%
Dec-24	323.3	121.5	0.21%	2.55%	3.21%	123.2	0.15%	1.78%	1.65%
Jan-25	324.7	122.1	0.45%	5.49%	3.29%	123.7	0.37%	4.54%	1.86%
Feb-25	325.5	122.3	0.23%	2.75%	3.14%	123.9	0.20%	2.37%	1.76%
Mar-25	325.7	122.4	0.06%	0.68%	2.81%	123.8	-0.08%	-0.98%	1.34%
Apr-25	326.4	122.7	0.24%	2.88%	2.78%	123.9	0.09%	1.06%	1.20%
May-25	326.9	122.9	0.13%	1.57%	2.77%	123.8	-0.07%	-0.86%	1.10%