

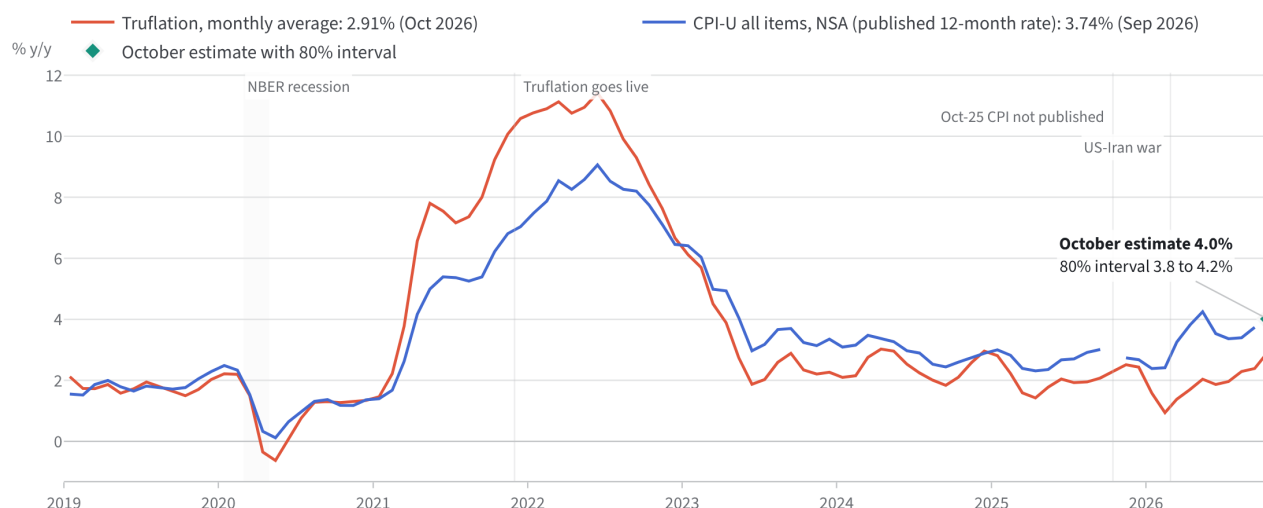
Truflation as a real-time signal for US CPI

To: Portfolio Manager | From: Shi Yuchen | 18 October 2026, data to 17 October 2026

Assessment

- **October CPI, due 10 November 2026: about 4.0% year on year, up from 3.7% in September [1].** The preferred model gives 4.01% with an 80% interval of 3.80% to 4.20%. BLS will not publish a 12-month rate for October because October 2025 prices were never collected [2]; in the form it will publish, the estimate is **+0.4% month on month, seasonally adjusted** (+0.1% to +0.7%).
- **Truflation tracks changes in CPI, not its level.** Monthly changes in the two rates have a correlation of 0.84, but the level gap has ranged from +3.5pp (2021-22) to -2.2pp (2026). Taken at face value, Truflation forecasts CPI worse than last month's print does.
- **Used to update the last official print, it cuts forecast error by 31%, and by 43% together with weekly gasoline prices:** an RMSE of 0.23pp against 0.41pp for carrying the last print forward, January 2022 to September 2026.
- **It is most useful when official data are delayed.** With the last CPI print two months old, as during the 2025 shutdown, the error is 0.30pp against 0.67pp for the stale print.

Where the signal stands



Truflation (monthly average of the daily rate) and the CPI 12-month rate (NSA), with the October nowcast and its 80% interval.

Truflation's latest reading is 3.08% (17 October 2026). Its October average so far is 2.90%, up 0.51pp from 2.39% in September, and the 12-month change in US retail gasoline prices has risen by 2.7pp, to 40%. Truflation is still below CPI in level, as it has been since February 2026, but it is moving up. The preferred model, a bridge equation on Truflation and gasoline, starts from the last print and adds the estimated effect of these changes:

Component	Rate or contribution
September 2026 CPI, 12-month rate (not seasonally adjusted)	3.74%
Drift	+0.01pp
Change in Truflation (+0.51pp)	+0.18pp
Change in gasoline 12-month inflation (+2.7pp)	+0.09pp
October 2026 nowcast	4.01%

Applying the model's past forecast errors to this estimate, the 12-month rate is above September's in 92% of cases. For the October release, the rate is converted into the seasonally adjusted index that BLS will publish. The missing October 2025 index is set to the geometric mean of September and November 2025 (324.65),

which is equivalent to the Cleveland Fed's treatment for its median CPI [3]. This gives an October index of 337.6 and a monthly change of +0.39%; the interval includes the historical error of the interpolation.

Out-of-sample evidence

Every month from January 2015 to September 2026, each model is re-estimated and forecasts that month's CPI 12-month rate on the 18th, using only data published by then: a CPI print after its BLS release date, Truflation two days and gasoline three days after the observation date. Since 2022 Truflation has been published in real time, so that period is the cleaner test.

Model	RMSE 2015-2026	RMSE 2022-2026	Change vs last print, 2022-2026
Last print (random walk)	0.41	0.41	
Momentum: AR(1) on changes	0.36	0.39	-4%
Truflation level at face value	1.12	1.36	+231%
Last print + Truflation change	0.29	0.32	-21%
Truflation bridge	0.24	0.28	-31%
Gasoline bridge	0.24	0.27	-34%
Truflation + gasoline bridge	0.19	0.23	-43%

RMSE in percentage points of the 12-month rate; 140 forecasts since 2015, 56 since 2022.

Using Truflation's level as the CPI forecast gives more than three times the error of carrying the last print forward. The fitted Truflation bridge significantly reduces the error (Diebold-Mariano p-value 0.007 for the Truflation bridge and 0.001 for the combined model since 2022). In 2026 the energy shock made gasoline the stronger input: the Truflation-only bridge was barely better than the last print (0.42pp against 0.47pp), while the combined model held at 0.23pp. The 80% intervals contained 73% of outcomes, below their nominal coverage.

When official data are delayed

The same forecasts made at the end of each month, with the last usable CPI print forced to be one to six months old; the withheld prints are also unavailable for estimation, and Truflation and gasoline continue as normal.

RMSE in percentage points, 2015-2026:

Age of the last CPI print	Last print	Truflation bridge	Truflation + gasoline
1 month	0.39	0.21	0.18
2 months (as in the 2025 shutdown)	0.67	0.33	0.30
3 months	0.89	0.41	0.39
6 months	1.38	0.52	0.56

During a delay, keep the last official print as the anchor, add the change in Truflation since that month, and show the age of the anchor next to the estimate. The error still grows with the age of the anchor; at six months the Truflation-only bridge is the more accurate of the two.

Why the levels differ

Truflation ran above CPI from March 2021 to September 2022, by up to 3.5pp, and has been below it since February 2026, by up to 2.2pp. The two indexes use different baskets, weights and sources. Housing is a major difference: Truflation's housing category (23% of its 2026 weights) includes mortgage interest, while BLS measures shelter through rents and owners' equivalent rent [4, 5]. Shelter explains much of the gap in some periods. In 2021-22 the gap to CPI excluding shelter was about half the headline gap, and in 2023-25, when CPI shelter inflation ran well above the rest of the basket, Truflation was 0.5pp above CPI excluding shelter although 0.7pp below the headline. The 2026 gap is different: Truflation is also 1.8pp below CPI excluding shelter, so housing does not explain it.

How to use it

- Use Truflation to update the official print between releases, not to replace it, and re-anchor on every CPI release.
- Track weekly gasoline prices alongside it; in an energy shock the gasoline term carries most of the information.
- During a data delay, use the bridge and report the age of the official anchor.
- Re-estimate after each release and check interval coverage; the relationship shifted during the 2026 energy shock.

Limitations

- Truflation released its first US index in December 2021, and all series are the vintages downloaded on 18 October 2026. Results since 2022 avoid the pre-launch history and are the ones quoted above.
- The preferred model was chosen on the same 2022-2026 sample on which it is scored.
- The October month-on-month figure depends on the interpolated October 2025 index.

The method, timing rules and full results are in `Nowcast_Methodology.pdf`; the analysis can be rerun in `notebooks/Algebris_Case_Study.ipynb`.

References

- [1] U.S. Bureau of Labor Statistics. Schedule of Releases for the Consumer Price Index. https://www.bls.gov/schedule/news_release/cpi.htm
- [2] U.S. Bureau of Labor Statistics. 2025 federal government shutdown impact on the Consumer Price Index. <https://www.bls.gov/cpi/additional-resources/2025-federal-government-shutdown-impact-cpi-faq.htm>
- [3] Federal Reserve Bank of Cleveland. Methodological Approach to Interpolating Missing October 2025 CPI Data. <https://www.clevelandfed.org/-/media/project/clevelandfedtenant/clevelandfedsite/indicators-and-data/median-cpi/methodological-approach-interpolating-missing-october-2025-cpi-data.pdf>
- [4] Truflation (27 March 2026). Truflation Releases Updated 2026 CPI Weights to Match Consumer Expenditures. <https://blog.truflation.com/truflation-2026-cpi-weights/>
- [5] U.S. Bureau of Labor Statistics. Measuring Price Change in the CPI: Rent and Rental Equivalence. <https://www.bls.gov/cpi/factsheets/owners-equivalent-rent-and-rent.htm>

Web sources accessed on 18 October 2026.