

Truflation BLS CPI Divergence Index (TruBLSDIV)

Methodology

February 24, 2026

Contents

<u>1. Executive Summary</u>	3
<u>2. Truflation BLS CPI Divergence Index Framework</u>	3
<u>3. The Output Metrics</u>	6
<u>4. Truflation BLS CPI Divergence Index Benefits</u>	6
<u>5. Summary</u>	7
<u>6. Version History</u>	7

1. Executive Summary

While the Bureau of Labor Statistics (BLS) Consumer Price Index (CPI) remains one of the most closely watched inflation measures, differences in methodology, data frequency, and category construction can cause it to diverge from real time inflation dynamics. These divergences can meaningfully influence market expectations, policy interpretation, and investment decisions. The BLS CPI and the Truflation US CPI Inflation Index are constructed differently and exhibit varying behavior over time. While the magnitude of the index differs, the Truflation Index, on average, leads the CPI by approximately 41 days. This lead time reflects Truflation's methodology and the daily updates of its TruCPI-US inflation index.

The Truflation BLS CPI Divergence Index is designed to quantify and track the gap between Truflation's real time US Inflation Index and the official BLS CPI. It will identify potential reversals in market trends by examining discrepancies between real time inflation data and government published statistics. By highlighting periods where TruCPI-US Index deviates from the BLS CPI, this index will reflect shifts in inflation momentum and indicate emerging economic pressures.

Its purpose is to:

- Track the relationship between Truflation U.S. CPI Inflation Rate and the BLS CPI Inflation Rate
- Identify periods of heightened or reduced inflationary pressures.
- Provide a timely measure for analysts, policymakers, and market participants to assess economic trends in near real time.

2. Truflation BLS CPI Divergence Index Framework

Truflation has emerged as an alternative data provider, offering a real time perspective on inflation dynamics through high frequency price data. Drawing on more than 30 independent sources, Truflation tracks over 15 million prices of goods and services across the United States.

A detailed explanation of the methodology underlying the two base indices used in the Truflation Divergence framework can be found in the TruCPI-US Index methodology on the Truflation website, with the BLS CPI methodology found here: <https://www.bls.gov/opub/hom/cpi/>.

Primary Calculation

The Truflation BLS CPI Divergence Index is primarily calculated as a direct difference between Truflation's U.S. CPI Inflation rate and the BLS CPI inflation rate. The formula is:

$$\text{Divergence Index} = \text{Truflation Annualized Inflation Rate} - \text{BLS CPI Annualized Rate}$$

A positive value indicates that Truflation is signaling higher inflation than the BLS CPI, suggesting elevated inflationary pressure. Conversely, a negative value indicates that the BLS CPI measure exceeds Truflation estimate, implying relatively lower real time inflation pressure.

Secondary Calculation

In addition to the direct measure, a secondary calculation is used to provide deeper analytical insight by capturing momentum, persistence and potential regime shifts in inflation dynamics. The calculation framework is:

- *Step 1: Calculate Daily Differences:* For each period, the BLS CPI inflation rate is subtracted from the Truflation CPI inflation rate:

$$\text{Difference} = \text{Truflation} - \text{BLS CPI}$$

- *Step 2: Apply a Rolling Window Standardization:* A three month rolling window is applied to compute both the average difference and the standard deviation of differences. This approach smooths short term noise while emphasizing statistically meaningful divergences.
- *Step 3: Normalized Divergence Index:* The standardized divergence is calculated as:

$$\text{Divergence Index} = \frac{\text{(3-month average difference)}}{\text{(3-month standard deviation)}}$$

The normalized measure tracks both the magnitude and persistence of divergence over time. Higher values indicate statistically significant deviations between the two inflation measures, often signaling emerging economic pressures or turning points. Values near zero suggest alignment and stability between real time and official inflation metrics.

3. The Output Metrics

The Truflation BLS CPI Divergence Index is updated on a daily basis and produces the following indexes:

1. Truflation BLS CPI Divergence Index percentage difference
2. Truflation U.S Inflation Rate (year on year percentage change)

3. BLS CPI Rate (year on year percentage change)
4. Full historical time series

The TruBLS DIV index was officially launched on April 29, 2025 with historical data from January 1, 2012.

4. Truflation BLS CPI Divergence Index Benefits

By regularly calculating and monitoring the Truflation BLS CPI Divergence Index, stakeholders gain a more nuanced and timely understanding of inflation dynamics and underlying economic conditions. The index highlights gaps between reported inflation and real time price movements, enabling more informed interpretation of official data and improved decision making. The key benefits of the index are:

- **Early Insight into Inflation Trends:** Detects gaps between real time price movements and official CPI data, providing a leading signal of potential inflation surprises.
- **Enhanced Economic Analysis:** Highlights periods of inflation variability not fully captured by traditional CPI metrics, giving analysts a more nuanced view of economic conditions.
- **Improved Investment Decision Making:** Supports asset allocation, hedging, and risk management by revealing real time deviations in inflation expectations.
- **Better Business Planning:** Helps companies anticipate cost pressures and adjust pricing strategies when inflation differs from official reports.
- **Market Sentiment Indicator:** Serves as a proxy for investor uncertainty or market volatility, with larger divergences signaling increased risk perception.

5. Summary

The Truflation BLS CPI Divergence Index offers a quantitative measure of the gap between real time inflation and the official BLS CPI, offering early insight into potential inflationary risks, complementing traditional BLS data with more frequent real time signals.

6. Version History

Version	Date Released	Notes
1.0	April 29, 2025	Genesis of the Truflation BLS Divergence Index
1.1	February 24, 2026	Truflation CPI & BLS CPI Weights updated