Truflation

Truflation US CPI Inflation Index (TruCPI-US)

Methodology

February 26, 2026

1. Executive Summary

The Truflation U.S. CPI Inflation Index (TruCPI-US) is a real-time, market-based measure of inflation designed to deliver transparent, high-frequency insight into price trends across the U.S. economy. Unlike traditional inflation metrics, which are published with a lag and rely heavily on sample surveys, the Truflation Index is constructed using actual market price data collected daily from more than 30 independent data providers, encompassing over 15 million data points. This approach enables a more timely and comprehensive view of inflation dynamics as they unfold.

By leveraging real-time transaction prices, the Truflation U.S. CPI Inflation Index captures shifting consumer price pressures across key components such as energy, food, housing, transportation, and services. The result is a daily inflation signal that reflects prevailing market conditions, offering a more responsive and adaptive alternative to conventional inflation measures.

The index serves several critical functions:

- ***Real-Time Economic Insight:*** Provides up-to-date inflation readings that support faster, more informed decision-making for policymakers, businesses, and investors.
- ***Market Sensitivity:*** Responds dynamically to economic shocks and price volatility, delivering forward looking inflation signals.
- ***Transparency and Objectivity:*** Relies on observable market prices rather than survey estimates, enhancing reliability and user confidence.
- ***Broad Utility:*** Delivered via APIs, dashboards, and data products to support financial analysis, risk management, strategic planning, and economic research.

In an environment characterized by rapidly evolving price behavior, the Truflation U.S. CPI Inflation Index represents a next generation inflation benchmark, one that closely aligns with real economic activity and deepens understanding of inflation trends in real time.

2. Truflation U.S. CPI Inflation Index Framework

The Truflation U.S. CPI Inflation Index employs a structured, multi-step framework to construct a modern Consumer Price Index that accurately

reflects contemporary consumption patterns. The methodology is governed by strict guardrails to ensure that movements in the index are driven exclusively by observed price changes, rather than by structural or methodological distortions. This consistent and balanced approach enables Truflation to aggregate multiple independent data sources into a single, representative measure of consumer price inflation.

The index construction process follows seven core steps:

1. Household expenditure category definitions
2. Determination of relative importance (weights)
3. Data source selection
4. Data ingestion
5. Normalization and indexing
6. Categorization and relative weighting
7. Aggregation of sub-indices

Step 1: Household Expenditure Category definition

Before constructing the Truflation U.S. CPI Inflation Index, it is essential to understand how households allocate their spending. Accurate and up-to-date insights into population structure and consumption behavior ensure that each expenditure category is appropriately represented and weighted within the index.

This step focuses on:

- Identifying household spending patterns across goods and services
- Establishing the relative importance (weight) of each expenditure category
- Defining methods to cross-reference and validate expenditure data across multiple independent sources
- Creating a robust foundation that supports forward-looking analysis and forecasting

Clearly defined expenditure categories are critical to establishing reliable expenditure baselines. Each category definition must:

- Be precise and unambiguous to ensure accurate classification of goods and services
- Reflect actual consumption patterns within the U.S. economy
- Allow for validation against alternative and independent datasets

Exhibit 1 outlines the twelve (12) expenditure categories used by Truflation, together with their definitions. Collectively, these categories capture the full spectrum of goods and services consumed by U.S. households.

Exhibit 1 - Truflation U.S. CPI Inflation Index 12 Expenditure Categories and Definitions

Expenditure Categories	Category Definition
Food & Non-Alcoholic Beverages	- Food at home including cereals and bakery products, meat, poultry, fish, eggs, dairy, fruits, vegetables, and other foods at home. - Food away from home is meals and non-alcoholic beverages consumers outside of home.
Alcohol & Tobacco	- Alcoholic beverages (beer, wine, and spirits) - Tobacco products and smoking supplies.
Clothing & footwear	- Apparel for women, men, children. - Footwear - Related products and services.
Housing	- Owned dwellings that includes mortgages, property taxes, maintenance repairs, insurance, and other household expenses. - Rented dwellings including new and existing rentals - Other lodging that includes hotels, airbnb etc.
Utilities	- Electricity - Natural gas - Fuel oil - Water and other public services.
Household Durables & Daily Use Items	- Household operations (personal services, other household expenses) - Housekeeping supplies (laundry/cleaning supplies, other household products, postage, stationery etc) - Furnishings and equipment (textiles, furniture, floor coverings, appliances and miscellaneous household equipment).
Health	- Health insurance - Medical services - Pharmaceuticals - Medical supplies
Transport	- Vehicle purchases (new & used cars and trucks, other vehicles) - Gasoline, other fuels, and motor oil - Other vehicle expenses (finance charges, maintenance and repairs, vehicle leases, rentals, insurance) - Public transportation
Communications	- Residential phone services, VOIP - Cellular phone services.

Source: Truflation

Recreation & Culture	- Admission fees - Audio and visual equipment and services - Pets toys hobbies and playground equipment - Other entertainment supplies and services
Education	- Education Services fees - Education books and materials.
Other	- Personal care products and services - Miscellaneous expenses (finance charges, funeral services etc)

Each of the twelve categories represents a share of total household expenditure. While category definitions remain consistent across all markets covered by Truflation, ensuring scalability and cross-market comparability, the relative importance (weight) of each category varies by country and market, reflecting differences in local consumption behavior.

Step 2: Determining Relative Importance
Category weights are derived by triangulating multiple independent data sources to ensure robustness, neutrality, and resilience against bias. The sources used in constructing the relative importance of the Truflation U.S. CPI Inflation Index include:

- Truflation Personal Inflation Calculator
- Credit card transaction data
- Census and mini-census data (where available)
- Household expenditure data sourced from Global Demographics, NielsenIQ, and government statistical agencies, including the U.S. Bureau of Labor Statistics.

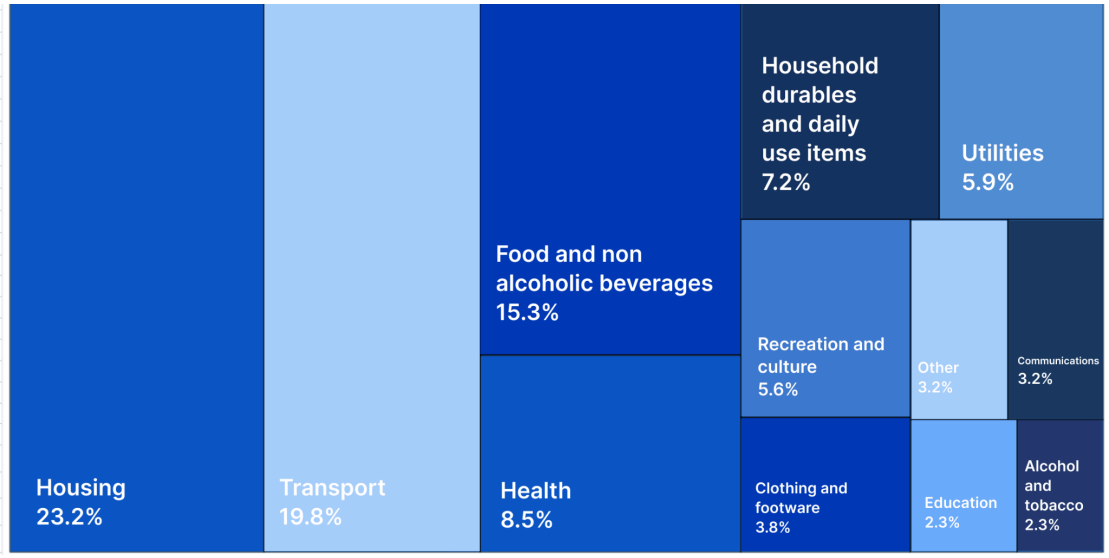
These primary inputs are subsequently validated against Truflation's proprietary data feeds and additional third-party sources, such as Census Monthly Retail Trade data, mortgage spending datasets, and external reference providers including Statista.

By integrating and harmonizing datasets that employ differing collection methodologies and coverage scopes, Truflation produces a comprehensive and unbiased representation of consumer spending behavior.

The relative importance of each expenditure category is reviewed and updated annually, with new weights implemented each February using the prior year's data. This annual recalibration ensures that the index remains closely aligned with evolving consumer preferences and spending patterns. Exhibit 2 presents

the relative importance of the twelve expenditure categories used in the Truflation U.S. CPI Inflation Index for 2024.

Exhibit 2 - Truflation US CPI Inflation Category Importance for 2024



Step 3: Data Sources

Truflation collaborates with a broad and diverse network of data partners to ensure a robust and representative data universe to calculate accurate average prices across all categories and subcategories. This diversified sourcing strategy minimizes measurement error, avoids dependence on any single provider, and reduces the risk of systemic bias or single points of failure.

Data is licensed from a combination of commercial and public sources, including data aggregators and research institutions. The Truflation U.S. CPI Inflation Index currently incorporates data from more than 30 providers and aggregators, each contributing to census-level coverage. Collectively, these partnerships give Truflation access to over 15 million individual price points for goods and services, far exceeding traditional inflation indices, which typically rely on approximately 80,000 observations.

The network of data providers is dynamic and continuously evolving. Truflation regularly expands and refines its partnerships to improve coverage, granularity, and accuracy. Current data partners (non-exhaustive) include NielsenIQ, GfK, Amazon, Big Mac Index, Walmart, Zillow, Trulia, Penn State University, the MRI (Marginal Rent Inflation) Index, Real Capital Analytics, Yahoo, the Energy Information Administration, OPIS, AAA Gas Prices, J.D. Power, CarGurus, Numbeo, CoreLogic, Kantar, Trivago, Hilton, Hyatt, among others.

Source: Truflation

Prior to inclusion in the index, each data partner is subject to a rigorous audit and certification process. This process includes:

- A comprehensive review of the provider's data collection methodology and documentation.
- An assessment of data representativeness, including geographic coverage, alignment with the U.S. population distribution, and estimated market share relative to Truflation's category and subcategory definitions.
- Evaluation of data quality, validation procedures, internal controls, and error-checking systems.
- Completion of all administrative and legal approvals, ensuring Truflation has the rights to integrate, aggregate, and repurpose the data within the index.

Until all requirements are fully satisfied, new data providers remain in a sandbox environment. Only upon successful completion of the audit and certification process are providers formally incorporated into the Truflation U.S. CPI Inflation Index.

Step 4: Data Ingestion
The Truflation U.S. CPI Inflation Index ingests data from partners that update at varying intervals; daily, weekly, or monthly. Each dataset is incorporated at its native update frequency, enabling the index to reflect price changes as soon as new information becomes available. As a result, Truflation publishes inflation readings up to 30 times faster than traditional inflation measures, which are typically released monthly with an average publication lag of approximately 45 days. In contrast, Truflation updates its indices on a daily basis.

All new data is collected each day at 23:00 Coordinated Universal Time (UTC). Historical price observations are ingested directly into Truflation's source database, with each data provider maintained in a dedicated, immutable table to preserve data integrity and auditability.

Data Quality
Every data ingestion triggers a mandatory daily quality control (QC) process. During QC, data is not altered or adjusted; instead, Truflation verifies the integrity, consistency, and representativeness of each data source. The key quality control checks include:

- *Historical Data Comparison:* Incoming data is compared against historical observations from the same source to assess consistency. Any inconsistencies trigger a red flag.

- *Data Presence and Continuity:* Each source is reviewed to ensure sufficient historical depth, at least 13 consecutive months (adjusted for data frequency), to support year-over-year comparisons. Missing data triggers a red flag. For weekly or monthly datasets, the most recent verified value is carried forward daily until a new observation is received.
    - Example: September data may be carried forward throughout October until October data is received in early November, at which point it replaces the interim values.
- *Current Data Validation:* Incoming observations are checked to ensure they differ appropriately from previously logged values and that no expected data points are missing. If data remains unchanged or absent beyond the expected update interval, a red flag is raised.
- *Data Variation Thresholds:* If new data deviates by more than ±5% from the prior observation from the same source, it is flagged for review. If no issues are detected, the data is cleared to proceed.

If a red flag is raised at any stage, a detailed investigation is initiated, either internally or in coordination with the data provider, and continues until resolution. If the investigation extends beyond one business day, the most recently verified data from that source is temporarily carried forward as interim input. Once the issue is resolved and the new data is validated, it replaces the interim values and proceeds to the calculation stage.

Historical Data Backcasting for New Providers
When onboarding new data providers, Truflation evaluates the historical depth of the dataset. If a dataset does not extend back to January 1, 2010, Truflation applies a backcasting methodology using existing category or sub-category index data.

Illustrative example: Cereals data provider that only has data from January 1st 2015:

- Extract the existing Cereals index data from the Truflation U.S. CPI Inflation Index from January 1, 2015 onward.
- Compare the existing series with the new dataset to calculate a correlation factor.
- Apply this correlation factor to the existing Cereals index from January 1, 2010 through December 31, 2014.
- Validate and ingest the resulting extended series into the system.

Once verified, the new dataset is added to the database as a date-stamped entry, becoming part of the active calculation universe. The system records the

exact backcast period, documenting the start and end dates of the historical data incorporated.

Data Integrity and Immutability
All source data tables within Truflation are immutable. Upon ingestion, every data point is time stamped and permanently preserved. Historical data is never overwritten, only supplemented with new or revised observations.

All calculations are likewise time stamped, enabling Truflation to:

- Maintain full historical transparency
- Support reproducibility and auditability
- Enable customized client use cases

As a result, Truflation maintains two distinct datasets:

- *Frozen Values:* These values are published as of a specific date and are immutable once finalized. They do not change, even if higher quality or revised source data becomes available later. Frozen values are displayed across Truflation dashboards and ensure consistency, reproducibility, and auditability.
- *Unfrozen Values:* These values are updated over time to incorporate late arriving or higher quality source data. Historical observations may be revised to improve accuracy. Unfrozen data is available to subscribing customers through Truflation's delivery channels, alongside frozen data.

Monthly Index Updates and Change Management
In addition to daily data ingestion, Truflation conducts monthly index updates on the 15th of each month. This process includes adding new data providers or removing existing ones. Index trends may change for three primary reasons:

- The addition or removal of data sources.
- Significant enhancements or revisions by existing data providers.
- Updates to Truflation's calculation model, including annual category weight updates or changes to raw data inputs.

When such changes occur, Truflation performs a parallel run to assess their impact on index levels, trends, and correlations. This process includes:

- Explaining observed changes across key metrics
- Verifying affected components using appropriate analytical techniques
- Documenting outcomes in Truflation's quality control log
- Communicating changes and their impact to customers via email and the Truflation dashboard on the effective date

Ingested Date vs Published Date
Once data is ingested and successfully passes all quality control procedures, it moves to the calculation stage and is then locked until publication at 23:59 UTC on the following day.

This intentional delay ensures:

- Adequate time to resolve any outstanding QC issues.
- Independence between data ingestion timing and index activation.
- Protection against data transmission or system disruptions.

For example data collected at 23:00 UTC on January 4 is published at 23:59 UTC on January 5. Accordingly, the index values published on January 5, reflect pricing data from January 4.

Step 5: Normalizing and Indexing
At this stage, each data partner's raw price data is converted into a normalized price index. This process is performed independently for every data source to ensure consistency, comparability, and methodological integrity across all datasets.

The index construction follows the steps outlined below:

- *Base Value:* The system identifies a price observation dated January 1, 2010, which is assigned a base index value of 100. If a data point is not available for this exact date, the exception automatically triggers a red flag, and the dataset is subject to the standard onboarding and validation procedures applied to new data providers.
- *Current Value:* The current value is defined as the most recent verified observation, adjusted to reflect the 24-hour publication delay applied across the index.
- *Index Calculation Formula:* Current Index Value = (Current Value ÷ Base Value) × 100.

Following index construction, Truflation conducts a second automated Quality Control (QC) review, which includes:

- Historical data comparison
- Verification of data presence and continuity
- Current data consistency checks
- Data variation threshold analysis

If the indexed data successfully passes this QC process, it is cleared to advance to the next stage of calculation. Should any red flags arise, the process is paused and the dataset is escalated for manual review and resolution before proceeding.

Step 6: Categorization and Relative Weighting

At this stage, each indexed data source is classified into its appropriate category and sub category. A single data source may contribute to multiple categories or sub categories, depending on the breadth and scope of its coverage.

Example: NielsenIQ data contributes to several expenditure areas, including:

- Food at Home
- Alcohol & Tobacco
- Household Durables and Daily Use Items (e.g., small appliances, household goods, stationery)
- Recreation & Culture (e.g., pet food and toys)
- Other (e.g., personal care products)

Each data source is assigned a relative weighting factor within its category or sub category. These weights are calibrated against existing sources and are determined using three equally weighted components:

1. *Number of Items Tracked:* Data sources covering a larger number of individual items receive a higher weighting. This is calculated as:

   Items tracked by new source ÷ Items tracked in the existing category or sub category

2. *Data Representativeness:* Representativeness is assessed based on geographic coverage, population coverage, and contribution to national sales within the category.
   a. A nationally representative dataset receives a factor of 1.0
   b. Sub-national datasets are adjusted proportionally.

   Example:
   a. Geographic coverage: 15% of the U.S. population → factor 0.15
   b. Market share within that geography: 50%
   c. Final representation factor: 0.15 × 0.50 = 0.075

3. *Data Collection Methodology:* Weighting adjustments reflect the robustness of data collection:
   a. Census-level data: factor 1.0

b. Primary collection methods (e.g., surveys with quality controls): 50% discount
c. Secondary collection methods (e.g., social or claimed data): an additional 50% discount, resulting in a 75% total discount.

These three components are combined in equal proportion to determine the final relative weighting of each data source within its assigned category or sub category. Exhibit 3 show how these weightings are applied to the data:

Exhibit 3: An Illustration of Weighting

Current Data Sources				Truflation Calculation Weights		
Data Source	Category	Sub Category	Data Frequency	Weighting on Sub Category	Relative Importance	Weighting on Truflation CPI
Numbeo	Housing	Rented Dwellings	Monthly	20%	8.1%	1.6%
ACY	Housing	Rented Dwellings	Monthly	20%	8.1%	1.6%
Zillow	Housing	Rented Dwellings	Monthly	20%	8.1%	1.6%
Redfin	Housing	Rented Dwellings	Monthly	20%	8.1%	1.6%
Apartment List	Housing	Rented Dwellings	Monthly	20%	8.1%	1.6%

Final weight calculation:

$$\text{Weight in Truflation CPI} = \text{Sub-Category Weight} \times \text{Sub-Category Relative Importance}$$

Relative importance values are stored in a dedicated database table. A full breakdown of category, sub-category, and sub-sub-category weights for the U.S. Inflation Index is provided in Appendix A.

Housing Specific Methodologies: Owned Housing Calculation Method
Owned housing presents a unique challenge in measuring the cost of living, as it reflects both housing consumption services and financial service components (mortgage interest and related charges).

Truflation employs a hybrid methodology that combines census level housing data with a modeled approach for mortgage-related costs. Data sources include, but are not limited to, the Federal Reserve Bank of New York, Freddie

Mac, Redfin, CoreLogic, Pennsylvania State University, the National Association of Realtors, Trulia, Zillow, and the U.S. Census Bureau.

- Repairs, maintenance, insurance, and property taxes are indexed directly using observed market prices.
- Mortgage interest and charges are calculated using a model based on:
    - Average monthly weighted property values for new and existing homes
    - Average weighted down payment assumptions:
        - First-time buyers (32% of purchases) with an average down payment of 8%
        - Repeat buyers (68% of purchases) with an average down payment of 19%
    - Mortgage term assumptions, with approximately 90% of borrowers selecting 30-year fixed-rate mortgages
    - Current 30-year and 15-year fixed mortgage rates sourced from Freddie Mac

Newly issued mortgages are weighted and combined with the existing mortgage stock to produce monthly price changes. This approach captures both home price movements and interest rate effects, providing a more accurate representation of housing-related inflation.

Housing Specific Methodologies: Rented Housing Calculation Method
Lease renewals tend to be stickier, with smoother and more gradual rent increases driven by fixed lease terms and long-standing landlord–tenant relationships. New rental leases, by contrast, are more volatile, respond quickly to real-time market conditions, and exhibit sharper peaks and troughs.

Truflation tracks both renewal rents and new lease rents, allowing analysts to distinguish between structural stability and market-driven volatility and to form a more complete picture of rental inflation dynamics.

A clear example occurred in 2021–2022, when new lease rents surged by more than 15% in many cities, while renewal rents increased by only 4–6%. Official housing inflation as measured by the BLS CPI did not reflect this surge until several months later. By capturing both new and renewal rents in real time, Truflation identified immediate rental market pressures and the actual household impact through renewals, providing a forward-looking and comprehensive view of future BLS CPI movements driven by lagged renewal increases.

Step 7: Aggregated Indexes
Following the application of relative weightings, an adjusted index is calculated for each data series by multiplying the normalized source index by its assigned weight:

$$\text{Adjusted Index} = \text{Source Index} \times \text{Weight in the TruCPI-US Index}$$

All sub sub category indices are then aggregated upward to form their respective sub categories, which are subsequently aggregated into categories, and ultimately into the headline Truflation U.S. Inflation Index.

Upon completion of aggregation, Truflation performs a third automated Quality Control (QC) review, which includes:

- Historical data comparison
- Verification of data presence and continuity
- Current data consistency checks
- Data variation analysis

If the data successfully passes this final QC stage, it proceeds to the delivery phase. Should any red flags be identified, the process is immediately halted and escalated for manual investigation and formal sign-off by at least two authorized individuals within Truflation.

Treatment of Consumer Substitution
The use of census-level data provides a significant methodological advantage for Truflation, as it inherently captures consumer substitution effects without the need for explicit modeling. Unlike traditional inflation measures that rely on substitution formulas or hedonic quality adjustments, Truflation's approach reflects evolving consumer behavior organically through the breadth and depth of its underlying pricing data.

Truflation collects price, volume, and spending information across a wide range of goods and services, enabling the calculation of true average prices. For example, within food categories, pricing data is captured across all available stock-keeping units (SKUs). This comprehensive coverage, combined with volumetric information, allows the index to naturally reflect real world shifts in consumer purchasing patterns over time.

As a result, Truflation does not apply separate substitution adjustments. Instead, the index is designed to provide the most complete and accurate representation of consumer experiences possible, based directly on observed market behavior rather than inferred assumptions.

3. The Output Metrics

The Truflation U.S. CPI Inflation Index is updated daily and produces the following data outputs:

- Truflation U.S. CPI Inflation headline index value (current day)
- Truflation U.S. CPI Inflation headline index value (one year prior)
- Year over year percentage change in the headline index
- Index values for each category and sub category (current day)
- Index values for each category and sub category (one year prior)
- Year over year percentage change for each category and sub category
- Full historical time series

The Truflation U.S. CPI Inflation Index, along with all associated category and sub category indices, is available through the Truflation Dashboard. The level of data granularity and historical depth accessible to users depends on their subscription tier. At Truflation's highest subscription level, the Enterprise Solution, users have access to the full suite of indices outlined in Exhibit 4.

Exhibit 4 - Truflation U.S. CPI Inflation Indexes

Category	Sub-Categories	Sub-Sub-Categories
Truflation US Inflation	- Core & Non Core - Goods & Services	
Food & Non Alcoholic Beverages	- Food at Home - Food Away from Home	- Food at Home - Cereals Index - Food at Home - Dairy - Food at Home - Fruit & Veg - Food at Home - Meat, Fish & Eggs - Food at Home - Other Foods
Housing	- Rented Housing - Owned Housing - Other Lodgings	
Transportation	- Vehicle Purchases - Gasoline - Public Transportation	
Utilities	- Natural Gas Utilities - Electricity Utilities	

Health		
Household & Daily Items	- Housekeeping Supplies - Hhold Furnishings & equipment	
Alcohol & Tobacco	- Alcoholic Beverages - Tobacco Products	
Clothing & Footwear	- Women and girls	
Communications		
Education		
Recreation & Culture		
Others		

All Truflation U.S. CPI Inflation Indexes are distributed through multiple delivery channels, including the Truflation Dashboard, APIs, FTP, and other data feeds, providing users with seamless access to the full dataset.

The TruCPI-US Index was launched on February 24, 2020, with historical data extending back to January 1, 2010.

In addition to the headline Truflation U.S. CPI Inflation Index and its category and sub category indices, the underlying price level data enables the construction of a suite of specialized sub indices that provide deeper insights into inflation dynamics. These include:

Sub-Indices	Definition / Methodology
Truflation U.S. CPI Aggregate Inflation Index (TruCPIAgg-US)	Aggregated inflation measures the cumulative change in prices over a specified period. It is calculated as the percentage change between the current index level and a defined base period. For the Truflation U.S. C{I Aggregated Inflation Index, the base period is January 20, 2020. Consequently, the aggregated inflation figure reflects the total price change from January 20, 2020, to the present day.
Truflation U.S. CPI Core Inflation Index (TruCPIc-US)	Core inflation measures the change in prices of inflation excluding the volatile categories of food and energy prices which are subject to sudden price shocks providing a clearer picture for monetary policy by focussing on the broader, more stable inflation pressures.. It reflects the underlying persistent price trends.
Truflation U.S. CPI Non Core Inflation Index	Non Core inflation measures the change in prices of food and energy components only.

(TruCPInc-US)	
Truflation U.S. CPI Goods Inflation Index (TruCPIg-US)	Goods inflation measures the change in prices of physical products purchased by consumers, such as food, clothing, electronics, vehicles, and household items. It reflects how the cost of tangible goods evolves over time and is influenced by factors like supply chain disruptions, raw material costs, production expenses, and retail pricing trends.
Truflation U.S. CPI Services Inflation Index (TruCPIs-US)	Services inflation tracks the change in prices for non-tangible products or services, including education, transportation, health care, insurance, utilities, housing and leisure activities. It captures shifts in the cost of services provided to consumers and is affected by labor costs, regulatory changes, demand for services, and operational expenses.
Truflation U.S. CPI Housing Inflation Index (TruCPIHous-US)	Separate methodology document under Truflation U.S. CPI Housing CPI Inflation Index is available.
Truflation U.S. CPI Rented Dwellings Inflation Index (TruCPIRent-US)	Separate methodology document under Truflation U.S. CPI Housing Inflation Index is available.
Truflation U.S.CPI Owned Dwellings Inflation Index (TruCPIHome-US)	Separate methodology document under Truflation U.S. CPI Housing Inflation Index is available.
Truflation U.S. CPI Eggs Inflation Index (TruCPIEggs-US)	Separate methodology document under Truflation U.S. CPI Eggs Inflation Index is available.

The underlying price index data also allows users to calculate percentage changes across all categories and sub categories for custom intervals, including day over day, month over month, or other user-defined periods.

This timing advantage provides Truflation's top tier clients with a unique competitive edge. They receive inflation insights earlier than the broader market, including preliminary monthly predictions on the 25th of the current month, followed by the final monthly prediction and full inflation report on the 6th of the following month.

4. Truflation versus other Inflation Measurement Tools

For decades, the Bureau of Labor Statistics (BLS) Consumer Price Index (CPI) and the Bureau of Economic Analysis (BEA) Personal Consumption Expenditures Price Index (PCE PI) have served as the primary benchmarks for

measuring U.S. inflation. More recently, Truflation has emerged as a real-time alternative, offering a fresh perspective on inflation dynamics.

All three metrics aim to track changes in the prices of goods and services over time. Truflation's primary objective is to provide the most comprehensive measure of the household cost-of-living impact in the U.S.

From a methodological standpoint, there are several key differences in data coverage, timeliness, and calculation approaches. The main distinctions between BLS CPI, BEA PCE PI, and Truflation are as follows:

- *Update Frequency:* BLS CPI & PCE PI: Updated monthly, providing a retrospective snapshot of inflation trends. *Truflation:* Updated daily, delivering a real-time view of inflationary pressures.
- *Data Coverage:* BLS CPI: Based on approximately 80,000 data points across a fixed basket of goods and services. Truflation: Tracks more than 15 million data points, offering a broader and more granular representation of the economy.
- *Adjustments and Methodology:* BLS CPI & BEA PCE PI apply substitution effects (accounting for consumer trade-down behavior) and hedonic adjustments (quality adjustments). Truflation: Due to its extensive data coverage, does not rely on substitution or hedonic adjustments. Market shifts and quality changes are inherently reflected in the data.
- *Housing Costs:* BLS CPI & BEA PCE PI use Owner's Equivalent Rent (OER), an imputed measure estimating what homeowners would pay if they rented their homes. BLS surveys rental units every six months, dividing the sample into six panels so that a portion of units is priced monthly. Truflation: Incorporates actual home purchase costs by modeling mortgage payments using current mortgage rates, mortgage volumes, and average home prices, providing a direct reflection of the housing costs faced by consumers.

Exhibit 5 - Comparison between PCE PI vs BLS CPI vs Truflation

	PCE Price Index	BLS CPI	Truflation (US CPI)
Publication	Bureau of Economic Analysis (BEA)	Bureau of Labor Statistics (BLS)	Tru Labs Inc.
Data Source	Census Bureau's Monthly Retail Trade Report & Housing Survey Consumer Expenditure Survey by BLS	Point-of-Purchase Price Check & Housing Survey Consumer Expenditure Survey	Market price data from 30+ data sources
# of Data Points	Data not available	80,000 items	15+ million items

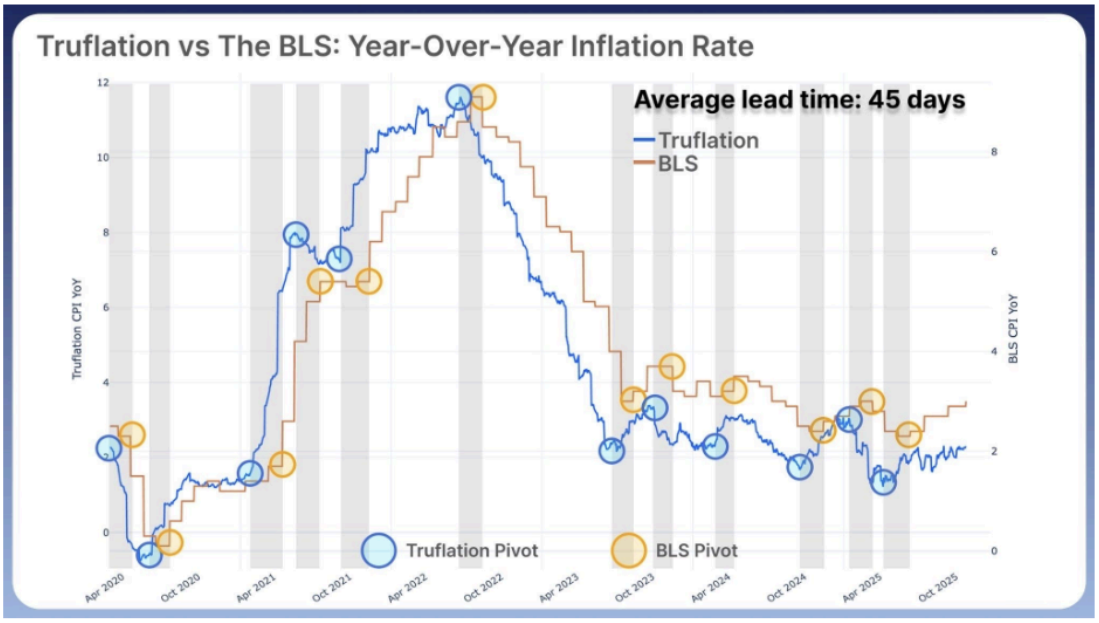
Source: Truflation

Publish Frequency	Monthly	Monthly	Daily
Markets/Indexes	Headline, Goods, Services & Core and categories	Headline, Goods, Services & Core and categories	Headline, Goods, Services & Core and categories
Weighting	Flexible	Fixed	Flexible
Substitution	Yes; Chain-type	Hedonistic adjustments	No
Calculation	(PCE PI in the current period - PCE PI in the previous period) / PCE PI in the previous period x 100%	(BLS CPI in the current period - BLS CPI in the previous period) / BLS CPI in the previous period] x 100%	(Truflation in the current period - Truflation in the previous period) / Truflation in the previous period] x 100%
Exclusions	Purchases of homes	Prices of investments, property taxes and purchases of homes	No exclusions
Main Users	Federal Reserve, Economists & Analysts	Federal Reserve, Government, Businesses, Economists & Analysts	Retail Users, Economists & Analysts

Truflation's approach is built on transparency, scale, and speed:

- *Deep Data Coverage:* Tracks more than 15 million items from over 30 data sources in the U.S.
- *Data Validation:* Every published data point is cross verified against at least three independent sources to ensure accuracy.
- *Granular Categorization:* A comprehensive and growing hierarchy of categories and sub categories provides deeper insights into market dynamics.
- *Daily Updates:* Inflation data is refreshed daily, rather than monthly for a more timely view.
- *Leading Indicator:* Historically, Truflation precedes government inflation measures by an average of approximately 45 days (see Exhibit 6).

Exhibit 6 - Truflation vs the BLS: Year on Year Inflation Rate



Truflation's data and methodologies have been validated by academic institutions and economists, including Pennsylvania State University and the Stockholm School of Economics, among others.

Truflation U.S. CPI Inflation Index configures its proprietary inflation data to align with the Bureau of Labor Statistics (BLS CPI) categorization, hierarchy, and weighting framework. Using this recalibrated dataset, Truflation produces daily updates to its monthly BLS inflation prediction. The Truflation U.S. CPI Inflation Prediction Report is released monthly and includes forecasts for the official BLS CPI inflation reading for the current month, as well as a quarterly outlook.

Prediction Performance
Since the launch of Truflation's prediction tool, the forecast accuracy has demonstrated an average deviation of ±0.07% relative to the actual BLS CPI figures.

The Truflation Prediction Prediction Process
Predicting the BLS Consumer Price Index (BLS CPI) requires a structured methodology tailored to inflation dynamics and economic conditions. Truflation's approach includes:

1. *Problem Definition:* The objective is to predict year-over-year BLS CPI changes on a seasonally unadjusted basis.

Source: Truflation

2. *Data Collection:* Predictions are based exclusively on Truflation U.S. CPI Inflation daily price data.
3. *Data Preprocessing:*
    a. Historical daily data from January 1, 2019 is used.
    b. Convert daily observations into monthly averages.
    c. Recalibrate data from Truflation's lowest-level categories to BLS CPI category definitions.
    d. Applying the BLS CPI weightings.
    e. Normalize the dataset to:
        i. Account for BLS reporting delays.
        ii. Mirror growth trends in rented housing onto owned housing.
        iii. Compute month-over-month growth rates.
        iv. Apply calculated growth rates to the current month's CPI prediction (e.g., November vs. October growth for the November CPI prediction).

The validated methodology confirms the predicted BLS CPI reading for the month and the model is continuously updated with new data, and its performance is regularly reassessed.

How is Truflation different from other Private Inflation Measures?
Several private organizations, such as PriceStats and the Adobe Digital Price Index (DPI), also measure inflation, reflecting a broader shift toward big data and real-time economics. These alternative indices can:

- Provide early warning signals of inflation or deflation.
- Improve decision-making in volatile economic environments.
- Help policymakers, businesses, investors, and households respond proactively.

The key differences between Truflation, PriceStats, and Adobe DPI are summarized in Exhibit 7:

Exhibit 7: Comparison between Truflation, PriceStats vs Adobe DPI

	Truflation	PriceStats	Adobe Digital Price Index
Data frequency / latency	Daily (real-time) updates.	Daily price scraping; indices published with small lag (e.g. 3-day lag)	Monthly (data aggregated from daily retail, but reported monthly) using product matches.

Scope (basket)	Broad consumption basket of market price data from 30+ data sources in the US with more than 15M items of goods and services that includes housing.	Consumer goods (retail products) sold by participating retailers which are primarily retail goods, not necessarily entire services or housing.	Online retail goods across 18 categories with offline purchases, services and many non retail goods excluded.
Weighting / aggregation method	Uses weights that reflect the broader consumption patterns and is updated annually.	Uses BLS CPI style weights where possible; calculates price changes using matched goods with no quality adjustments).	Uses Fisher price index, matched products, weighted by actual quantities purchased month to month.
Type of prices tracked	Broad consumption of goods (new and used), housing (owned and rented) and services.	Retail goods sold by selected retailers (mainly physical and online retail) — generally excludes services, housing,	Online retail goods only; excludes offline purchases, many services, and non-retail consumption.

The strategic benefits of each provider are:

- **Truflation:** Offers the most comprehensive, real-time view of inflation and cost-of-living. Daily updates and broad coverage allow detection of inflationary pressures that traditional indices may miss, particularly during economic volatility.
- **PriceStats:** Provides high-frequency monitoring of retail inflation via price scraping. Captures retail price shifts quickly but underrepresents services, housing, and non-retail consumption.
- **Adobe DPI:** Excels at tracking inflation/deflation in **online retail markets**. Often acts as a **leading indicator** for broader retail trends but cannot serve as a **complete cost-of-living or macro inflation index** due to its narrow scope.

5. Truflation US Inflation Index Benefits

The Truflation U.S. CPI Inflation Index (TruCPI-US) offers several distinct advantages over traditional inflation measures and other private alternatives, benefiting policymakers, investors, businesses, and individual users alike:

- ***Real-Time Inflation Insights:*** Unlike government measures that are published monthly with significant lag, Truflation is updated daily. This enables users to monitor inflation as it evolves, detect turning points

earlier, and respond promptly to emerging price pressures or disinflation trends.

- ***Leading Indicator Advantage:*** Historically, Truflation has led official government inflation indices by approximately 45 days, providing early signals ahead of BLS CPI and BEA PCE releases. This lead time offers a competitive edge for forecasting, strategy, and decision-making, allowing timely adjustments to policies, portfolios, pricing, or hedging strategies.
- ***Unmatched Data Depth and Coverage:*** Truflation tracks over 15 million daily price points across goods and services from 30+ data providers. This extensive coverage enables a more accurate representation of real-world consumer spending, reduces reliance on statistical assumptions such as substitution or hedonic adjustments, and enhances resilience during volatile or rapidly changing market conditions.
- ***More Realistic Housing Cost Measurement:*** Unlike BLS CPI and BEA PCE, which rely on Owner's Equivalent Rent (OER), Truflation incorporates actual housing market dynamics, including mortgage rates, mortgage volumes, and home prices. This approach provides a more direct and intuitive measure of how housing costs impact consumers.
- ***Transparency and Methodological Consistency:*** Truflation indices are constructed from observable market prices, providing a clear linkage between underlying data and published inflation readings. The methodology is consistent, robust, and externally validated by academic institutions, economists, and professional analysts, reinforcing confidence in its use for high-stakes decision-making.

6. Summary

The Truflation U.S. CPI Inflation Index delivers an unmatched, real-time dataset for macroeconomic analysis. Built on the pillars of speed, scale, granularity, and transparency, Truflation provides insights that were previously unavailable, enabling faster and more informed decision-making in an increasingly dynamic economic environment.

Key Foundations:

- Data Sources: 30+
- Data Points: 15+ million
- Update Frequency: Daily
- Most Recent Household Expenditure Weight Update: 2025

These next-generation inflation indices support a wide range of applications, from smarter, faster market hedging strategies to more accurate cost forecasting and pricing decisions for new product development.

By combining real-time price data with broad market coverage, the Truflation U.S. CPI Inflation Index offers a timely, actionable, and transparent view of inflation, empowering investors, businesses, policymakers, and researchers alike.

7. Version History

Version	Date Released	Notes
1.0	March 16, 2022	Genesis of the Truflation US CPI Inflation Index
1.1	February 26, 2023	2023 weighting update and new data partners
1.2	February 23, 2024	2024 weighting update and new data partners
1.3	February 20, 2025	2025 weighting update, new data partners, and housing calculations explanation (owned and rented)
1.4	February 26, 2026	Methodology update and new data partners

APPENDIX A

Relative Importance for the Truflation US CPI Inflation Index

Below is the relative importance data, including the exact weights of each category, sub category and constituents for the Truflation US CPI Inflation Index.

Truflation Category	Truflation Sub-Category	Weighting
Food & Non-alcoholic Beverages		15.3
Food & Non-alcoholic Beverages	Food at home	10.3
Food & Non-alcoholic Beverages	Food away from home	4.9
Housing		23.2
Housing	Other lodging	1.3
Housing	Owned dwellings	13.7
Housing	Rented dwellings	8.1
Transportation		19.8
Transportation	Gasoline, other fuels, and motor oil	3.2
Transportation	Other vehicle expenses	7.0
Transportation	Public and other transportation	0.5
Transportation	Vehicle purchases (net outlay)	9.1
Utilities		5.9
Utilities	Electricity	3.3
Utilities	Fuel oil and other fuels	0.2
Utilities	Natural gas	0.9
Utilities	Water and other public services	1.5
Health		8.5

Health	Drugs	0.8
Health	Health insurance	6.0
Health	Medical services	1.4
Health	Medical supplies	0.3
Household Durables & Daily Use Items		7.2
Household Durables & Daily Use Items	Household furnishings and equipment	3.6
Household Durables & Daily Use Items	Household operations	2.3
Household Durables & Daily Use Items	Housekeeping supplies	1.3
Alcohol & Tobacco		1.9
Alcohol & Tobacco	Alcoholic beverages	1.1
Alcohol & Tobacco	Tobacco products and smoking supplies	0.8
Clothing & Footwear		3.8
Clothing & Footwear	Children under 2	0.2
Clothing & Footwear	Footwear	0.8
Clothing & Footwear	Men and boys	0.9
Clothing & Footwear	Other apparel products and services	0.5
Clothing & Footwear	Women and girls	1.4
Communications		3.2
Communications	Cellular phone service	2.8
Communications	Residential phone, VOIP & phone cards	0.4
Education		2.3
Education	Education fees	2.1
Education	Reading	0.2
Recreation & Culture		5.6

Recreation & Culture	Audio and visual equipment and services	2.0
Recreation & Culture	Fees and admissions	0.8
Recreation & Culture	Other entertainment supplies, equip services	1.1
Recreation & Culture	Pets, toys, hobbies & playground equipment	1.7
Other		3.2

APPENDIX B
Frequently Asked Questions

Q: What is Truflation?
Truflation is the real-time truth layer for macro markets. We provide investors with actionable, high-frequency trading signals built on transparent, independently verified economic data. Instead of waiting 30–60 days for government releases, our users get daily insights across 200+ indexes - inflation, housing, consumer categories, and more - all derived from real market prices, cross-checked across multiple sources, and published on-chain for transparency. AI helps us process millions of data points so enterprises can access clean, audited, ready-to-use signals through our API.

Q: How are Truflation inflation metrics different from government inflation metrics?
Enter into the realm of inflation measurements: the Bureau of Economic Analysis Personal Consumption Expenditures Price Index (PCE PI) and the Bureau of Labor Statistics Consumer Price Index (BLS CPI) have long held the spotlight, Truflation has emerged as an alternative real-time inflation index, promising a fresh perspective to truly understanding inflationary trends. All three metrics are designed to measure inflation and track the change in the prices of goods and services over time. The main differences between the PCE PI, the BLS CPI and Truflation are:

- *Update Frequency:* PCE PI & BLS CPI are updated monthly, offering a snapshot of inflation trends over the past month. Truflation is updated daily, providing a real-time perspective on inflationary changes.
- Data Points: The BLS CPI is based on roughly 80,000 data points, encompassing a selected basket of goods and services, while Truflation tracks over 15 million items, capturing a broader spectrum of the market and offering a more granular view.
- *Adjustment & Mechanisms:* The PCE PI & BLS CPI incorporate mechanisms like substitutions (when consumers switch from a more expensive item to a cheaper one) and hedonic adjustments (which account for quality changes in goods and services). Given the comprehensive data coverage of Truflation, it doesn't need to rely on such mechanisms. Its broad scope inherently captures market shifts and quality variations.
- *Housing Costs:* The PCE PI & BLS CPI consider housing-related prices as owners equivalent rent which is derived from the BLS CPI and estimates what homeowners would pay if they were renting their homes. Truflation's CPI Index includes the cost of home purchases by factoring in mortgage payments (by calculating the monthly mortgage rate, volume of mortgages issued and the average price of housing), thus

providing a more direct reflection of the housing market's impact on consumers' expenses.

Q: How is Truflation different from other private inflation measures?
There are a number of private organisations that measure inflation beyond Truflation, like Price Stats or Adobe Digital Prices which reflects a broader shift in economics, away from relying solely on official monthly / quarterly data towards "big data, real time" economics. They provide an early warning of inflation surges or deflation, which is useful in volatile times.

For central banks or policymakers, these alternative indices are helpful as complements and eventually as replacements to traditional measures. For businesses, investors, or households, these indices help anticipate where price pressure is building (or receding) sooner than official data, enabling proactive decisions (e.g. hedging, pricing adjustments, inflation-linked strategies).

The strategic benefits of each of the three services:

- *Truflation:* Provides you with the most comprehensive, real time look at inflation or cost of living. This is because of its daily updates and its broad basket coverage, Truflation is above to capture inflationary pressures that standard indexes miss, especially in volatile environments.
- *Price Stats:* Provides you with high frequency monitoring of retail inflation trends, because of its daily scraping of large amounts of retail-price data. PriceStats observes inflation shifts almost in real time, Given PriceStats largely reflects retail goods sold by a subset of (mostly large) retailers, it may underrepresent services, housing, small/local shops, and non-retail consumption, which are all important parts of a typical consumer basket.
- *Adobe DPI:* It's a comprehensive understanding of online retail prices. It is useful for tracking deflation or inflation in the online retail space - often a leading indicator for broader retail price trends but only captures online retail goods and excludes offline purchases, many services, housing, and non-retail consumption. So it can't serve as a full "cost-of-living" or macro inflation index on its own.

Q: What are the different indexes within the Truflation US CPI product? Please provide a brief description.
Truflation provides real-time, independent economic data designed for financial institutions, asset managers, trading firms, and on-chain applications. Our flagship product (the Truflation Indexes) measures inflation using market based prices rather than government survey data. Unlike the BLS CPI, which is updated monthly and subject to revisions, Truflation provides daily, transparent, and unbiased inflation metrics.

Key attributes:

- Real-time: Updated daily
- Unbiased: Independent from government collection methodologies
- Transparent: All data sources, weights, and methodologies are openly documented
- Institutional-grade: Engineered for reliability, with historical series available

Truflation transforms raw price movements into actionable signals, enabling:

- Macro trading strategies
- Inflation-linked product development
- On-chain index construction
- Risk management and hedging
- Forecasting, analytics, and model calibration

Core delivery methods:

- Truflation Indexes (Headline, Core, Sector-level)
- Inflation Drivers Breakdown (category-level decomposition)
- Dashboard & Analytics Portal
- API Access & Data Feeds
- Custom Index Creation (for enterprise clients)

Q: Why should I trust Truflation's inflation metrics?
Truflation uses:

- *Deep Data*: We track more than 15+ million items from over 30+ data sources in the US. Each data point that we release within the Inflation Index has a minimum of 3 different data sources to enhance accuracy.
- *Granular Categories:* We have an extensive and continually growing list of categories and sub categories available that lend different market insights.
- *Updated Daily:* Truflation's tracking of goods and services is updated daily.
- *Faster:* Truflation is a leading indicator of the government indexes by an average of 45 days.

Truflation data has been validated by a number of institutions and economists including the Pennsylvania State University, Stockholm Economic University etc.

Q: How does Truflation determine category weighting?
Each category's relative importance is achieved by taking multiple sources and triangulating the impact. These data sources include:

- Truflation Personal Inflation Calculator

- Credit card transaction data
- Government Census / Mini Census (where available)
- Household expenditure surveys from NielsenIQ, Kantar, Global Demographics combined with government statistics departments e.g. Bureau of Labor Statistics

These data sources are then validated against Truflation's data providers and other third-party sources (e.g. government retail sales data, mortgage spending etc.). Combining these data sources and aligning the different methodologies allows Truflation to produce more comprehensive unbiased data. The relative importance is updated annually and implemented in February of each year using the previous year's data to reflect the changing consumer expenditure behaviors.

Q: How is the ingested data verified?
For every data partner that is ingested into Truflation, an audit process is conducted that includes: documentation of the methodology, determining the representation of the data, understanding the quality control procedures the data partners undertake, and of course, administrative & legal document sign-off; which is necessary to ensure Truflation has the legal representation to repurpose the data and add it to other data sources to create the index.

Thereafter, every day Truflation undertakes a quality control process on every data set that includes the following 4 steps:

- Historical data comparison
- Most recent data presence
- Current data comparison
- Data variation assessment

Q: How are the data indexes built?
Truflation leverages at a minimum three data sources for every index that is released and each data set for that index is weighted according to:

- The geographical representation
- The type of methodology used to collect the data and
- The volume of data

Each of the weighting elements (1 x 2 x 3) for the data partner are then multiplied to determine the overall aggregated weighting factor for this data partner. Then this is compared to the other data providers in that category and is assigned a weighting factor of the new data vs existing data partners.

Q: How much historical data is available?
Truflation's historical data for each market varies, with the US Inflation Index representing the longest history, going back to January 1, 2010.

Q: What is the difference between Frozen and Unfrozen data?
Truflation has two different types of data; Frozen and Unfrozen Data. The difference between the two data sets are:

- *Frozen Data:* Data that is fixed, immutable, and does not change. Once "frozen," it will not be updated, overwritten, or altered. Used for consistency, reproducibility, audits, or stable baselines.
- *Unfrozen Data:* Data that is updated and subject to change. New data partners can be added, values can change, and the dataset evolves over time.

Data on our dashboard are all Frozen but our subscribing customers have the option to access both Frozen and Unfrozen data through the member dashboard.

Q: How does Truflation measure Owned Housing?
Truflation employs a hybrid methodology that combines census level housing data with a modeled approach for mortgage related costs. Data sources include, but are not limited to, the Federal Reserve Bank of New York, Freddie Mac, Redfin, CoreLogic, Pennsylvania State University, the National Association of Realtors, Trulia, Zillow, and the U.S. Census Bureau.

The Owned Housing Index is calculated by:

- Repairs, maintenance, insurance, and property taxes are indexed directly using observed market prices.
- Mortgage interest and charges are calculated using a model based on:
    - Average monthly weighted property values for new and existing homes
    - Average weighted down payment assumptions:
        - First-time buyers (32% of purchases) with an average down payment of 8%
        - Repeat buyers (68% of purchases) with an average down payment of 19%
    - Mortgage term assumptions, with approximately 90% of borrowers selecting 30-year fixed-rate mortgages
    - Current 30-year and 15-year fixed mortgage rates sourced from Freddie Mac

Newly issued mortgages are weighted and combined with the existing mortgage stock to produce monthly price changes. This approach captures both home price movements and interest rate effects, providing a more accurate representation of housing related inflation.

Q: How does Truflation measure rental prices?
Generally renewals tend to be stickier, smoother and gradual increases due to lease terms and landlord-tenant relationships while new rentals tend to be more volatile, responding to real time conditions, stronger peaks and troughs. Truflation is tracking both and allows analysts to understand the stability and market volatility providing a complete picture of the rental inflation market.

To provide an example of this in 2021 and 2022 new lease rents surged >15% in many cities, but renewal rents were rising only 4–6%. The official housing inflation by the BLS didn't spike until many months later. Measuring both revealed immediate pressure of new rentals and the actual household impact of renewals giving us a comprehensive view of the expected future BLS CPI changes (lagged renewal increases).

Q: Why does the Truflation Index often move on the 1st of the month?
Truflation measures inflation as a year on year price percentage change of the basket of goods and services. Truflation tracks the price changes in real time, pulling from millions of price points across dozens of categories and subcategories.

The prices of goods and services from each of the different data providers, are updated on different schedules, eg daily, weekly and monthly. The monthly updates which include housing (rent, utilities), insurance, residential communications, education fees, etc get updated on the 1st of every month. Given that these categories represent over 50% of household expenditures, when these categories shift then the overall index adjusts accordingly.

These shifts on the 1st of every month can cause visible spikes. But it's also the cleanest, most transparent way to show how inflation trends naturally form including the volatility. Our users rely on Truflation to spot turning points in real time not months later.

Q: Is Truflation's estimate of the CPI each month derived from the Truflation BLS CPI Index? How is this index calculated?
The Truflation monthly prediction of the BLS Consumer Price Index (CPI) involves a structured methodology:

- Create monthly numbers by using the average of the days in the month
- Use the Truflation BLS dataset
- Normalize the data to account for delays in the BLS CPI data combined with the mirroring of the growth trends of rented housing on owned housing
- Apply the % change month-on-month to the current month to get the prediction (e.g., for November 2025, we use the growth rate change from

November vs. October 2024 and apply that growth rate to the prediction)

There are other steps we go through, but we are happy to take you through this as needed. The monthly Truflation estimate is not included in the data files we send.

Q: Are the indexes under Truflation BLS CPI index, Truflation's own measurements that map to BLS CPI categories?
These are Truflation own measurements mapped to the BLS CPI Categories with the BLS weighting applied. This is not Truflation's estimate of what the CPI index will be as Truflation applies other factors to the calculation and model e.g. delaying housing data, replicating rented housing on OER etc etc.

Q: How is the Truflation BPS CPI forecast accuracy determined?
To determine whether Truflation had a correct estimate, an exact match of the year on year percentage change to one decimal point is used when comparing the Truflation forecast of the BLS CPI compared to the actual BLS CPI number. A factsheet is provided that includes a table of forecasts against BLS figures and the deviation.

Q: When is the data collected?
New data from each available source is gathered daily at 11:00 PM Coordinated Universal Time (UTC). All the collected historical pricing data points are loaded directly into our source database. Each provider's data is then added into a separate database table.

Every time new data is ingested and collected, necessary quality control procedures are undertaken daily to ensure the accuracy and representation of the data sources. Once this is complete then the data is updated in the system.

It undergoes a 24-hour hold period and is then locked until 23:59 UTC the next day. For example, data that is collected at 23:00 UTC on the 4th of the month will be published at 23:59 UTC on the 5th.

Q: How is the data delivered?
The delivery of the data depends on the subscription model of the client, but there are three types of delivery; through the Truflation Member Dashboard, API or via FTP's . For more details please visit our pricing page.

Q: What is the frequency of updates?
The Truflation data is updated daily across all of our markets.

Q: What data is included in CSV files?
There are five sets of data in the data files delivered and access to each of the data sets depends on the subscription tier.

- *Truflation CPI Data:* Data includes headline, goods, services, core and associated Truflation categories and sub categories.
- *Truflation BLS CPI Data:* This is Truflation data mapped and aligned to the BLS CPI categorisation and associated weighting. This data includes headline, energy, food, Core, Core goods categories and core services categories.
- *BLS CPI Data:* This is the BLS CPI data as published by the BLS.
- *Truflation BEA PCE Data:* This is Truflation data mapped and aligned to the BEA PCE PI categorisation and associated weighting. This data includes headline, goods, services, core and associated categories.
- *BEA PCE PI Data:* This is the BEA PCE PI data as published by the BEA.

For each index that is published there are three data points:

- The Index number published today
- The Index number published a year ago today
- The Year on Year Inflation rate

The exact details of each of the content of the data sets are available through the download dashboard in the members area.

Q: Is the data disseminated simultaneously to all customers?
Enterprise clients can receive the data up to 24 hours ahead of our Pro or Basic subscribing clients.

Q: How are the research reports disseminated to clients? How often are they updated?
The Truflation research reports are disseminated to our clients through email and the members dashboard on the Truflation.com website as and when they come available. The Monthly Inflation report is updated monthly.

Q: What is Truflation's security protocol?
At Truflation, we prioritize data security to protect the integrity and confidentiality of the information provided by our data partners. Our security measures include:

- Role based access control (RBAC) to ensure only necessary personnel can access sensitive data.
- Access to raw data is restricted to authorized personnel only based on the principle of least privilege.
- Multi-factor authentication (MFA) is enforced for all system access.
- API access is secured using OAuth 2.0, API keys, or token-based authentication.

Q: What measures does Truflation take to protect against external threats?
Our systems are hosted on secure cloud environments (AWS) with DDoS protection and firewall security.

Q: How does Truflation monitor and log access to ensure system security?
Continuous monitoring and logging of data access and usage is crucial for data security. We use SIEM tools, aggregate logs and identify anomalies to detect security breaches, enabling Truflation to proactively protect the data.

Q: What policies does Truflation have for secure data handling and retention?
Truflation upholds principles of data transparency and retain information exclusively for the purposes consented to, adhering to stringent policies that govern both the management of data throughout its lifecycle and its eventual deletion.