



Economic News Release

SHARE ON:

CPI

FONT SIZE:

PRINT:

Consumer Price Index Summary

Transmission of material in this release is embargoed until
8:30 a.m. (EDT) Thursday, June 14, 2012 USDL-12-1183

Technical information: (202) 691-7000 Reed.Steve@bls.gov www.bls.gov/cpi
Media Contact: (202) 691-5902 PressOffice@bls.gov

Consumer Price Index - May 2012

The Consumer Price Index for All Urban Consumers (CPI-U) decreased 0.3 percent in May on a seasonally adjusted basis, the U.S. Bureau of Labor Statistics reported today. Over the last 12 months, the all items index increased 1.7 percent before seasonal adjustment.

The gasoline index declined 6.8 percent in May, leading to a sharp decrease in the energy index and the decline in the all items index. The indexes for natural gas and fuel oil declined as well, though the electricity index increased. The food index was unchanged, with a slight decline in the index for food at home offsetting an increase in the food away from home index.

The index for all items less food and energy rose 0.2 percent in May, the third consecutive such increase. The indexes contributing to the increase were largely the same ones as in April: shelter, medical care, used cars and trucks, apparel, airline fares, and new vehicles. The indexes for household furnishings and operations and for tobacco declined.

The 12-month change in the index for all items was 1.7 percent in May; this figure has been declining steadily since its 3.9 percent recent peak in September 2011. The decline has been driven mostly by the energy index, which decreased 3.9 percent over the last 12 months. This was its first 12-month decline since October 2009. The 12-month change in the food index, which was 4.7 percent as recently as December, fell to 2.8 percent in May. The 12-month change in the index for all items less food and energy was 2.3 percent in May, the same figure as in April and March.

Table A. Percent changes in CPI for All Urban Consumers (CPI-U): U.S. city average

Seasonally adjusted changes from
preceding month

Un-

	Nov. 2011	Dec. 2011	Jan. 2012	Feb. 2012	Mar. 2012	Apr. 2012	May 2012	adjusted 12-mos. ended May 2012
All items.....	.1	.0	.2	.4	.3	.0	-.3	1.7
Food.....	.1	.2	.2	.0	.2	.2	.0	2.8
Food at home.....	.0	.2	.0	.0	.1	.2	-.1	2.7
Food away from home (1)...	.3	.2	.4	.1	.2	.3	.2	2.9
Energy.....	-.5	-1.3	.2	3.2	.9	-1.7	-4.3	-3.9
Energy commodities.....	-.6	-2.0	.9	5.7	1.7	-2.6	-6.4	-3.7
Gasoline (all types)....	-.9	-2.1	.9	6.0	1.7	-2.6	-6.8	-4.0
Fuel oil (1).....	2.7	-1.0	1.4	2.8	2.7	-1.1	-2.8	-1.1
Energy services.....	-.4	-.2	-.8	-.8	-.4	-.2	-.7	-3.6
Electricity.....	.2	-.1	.0	.0	-.8	.2	.3	.2
Utility (piped) gas service.....	-2.6	-.6	-2.9	-3.4	.9	-1.8	-4.1	-14.9
All items less food and energy.....	.2	.1	.2	.1	.2	.2	.2	2.3
Commodities less food and energy commodities....	.1	-.1	.2	.1	.2	.2	.2	1.6
New vehicles.....	-.2	-.2	.0	.6	.2	.4	.2	1.3
Used cars and trucks....	-.4	-.7	-1.0	-.2	1.3	1.5	1.0	3.5
Apparel.....	.5	-.1	.9	-.9	.5	.4	.4	4.4
Medical care commodities (1).....	.2	.2	.6	.8	.4	.0	.0	2.7
Services less energy services.....	.2	.2	.2	.1	.2	.3	.2	2.5
Shelter.....	.2	.2	.2	.2	.2	.2	.2	2.3
Transportation services	.0	.1	.0	-.2	.3	.5	.3	1.9
Medical care services...	.4	.4	.2	.0	.3	.4	.5	3.9

1 Not seasonally adjusted.

Consumer Price Index Data for May 2012

Food

The food index was unchanged in May after increasing 0.2 percent in April. The index for food at home fell 0.1 percent in May as four of the six major grocery store food groups declined. The index for nonalcoholic beverages fell 0.6 percent in May while the index for meats, poultry, fish, and eggs declined 0.5 percent; both indexes rose in April. The index for dairy and related products declined 0.4 percent in May, its fourth consecutive decline, while the cereals and bakery products index decreased 0.1 percent. The fruits and vegetables index, in contrast, rose 0.4 percent in May, while the index for other food at home rose 0.3 percent, its sixth consecutive increase. The food at home index has risen 2.7 percent over the last 12 months, with the fruits and vegetables index declining 0.4 percent over that span and the other five groups increasing from 1.2 percent (nonalcoholic beverages) to 4.8 percent (other food at home). The index for food away from home rose 0.2 percent in May and has increased 2.9 percent over the last 12 months.

Energy

The energy index declined 4.3 percent in May after a 1.7 percent decline in April. The gasoline index fell 6.8 percent, its largest one month decline since December 2008. (Before seasonal adjustment, gasoline prices decreased 3.6 percent in May.) The fuel oil index

also continued to fall, declining 2.8 percent. The index for energy services decreased for the eighth consecutive month, falling 0.7 percent as a 4.1 percent decline in the index for natural gas more than offset a 0.3 percent increase in the index for electricity. Over the past 12 months, the electricity index has edged up 0.2 percent but the other major energy indexes have declined. The gasoline index has fallen 4.0 percent, the fuel oil index has declined 1.1 percent, and the index for natural gas has decreased 14.9 percent.

All items less food and energy

The index for all items less food and energy increased 0.2 percent in May, the same increase as in April. The index for shelter rose 0.2 percent for the eighth month in a row, with the rent index up 0.2 percent and the index for owners' equivalent rent up 0.1 percent. The index for lodging away from home rose 1.5 percent in May after declining in April. The index for medical care rose 0.4 percent, its largest increase since November, as the index for hospital services rose 0.6 percent for the second month in a row. The index for used cars and trucks posted its third consecutive significant increase, rising 1.0 percent. The apparel index also continued to rise, repeating its April increase of 0.4 percent. The index for airline fares, up 2.1 percent in April, rose 1.0 percent in May, while the new vehicles index increased for the fourth month in a row, rising 0.2 percent. The indexes for recreation and personal care each rose 0.1 percent in May. Among the few indexes to decline were household furnishings and operations, which declined 0.3 percent, and tobacco, which fell 0.2 percent.

The index for all items less food and energy has risen 2.3 percent over the last 12 months, the same figure as the previous two months. The shelter component also has risen 2.3 percent over that span. Indexes rising at a slower rate include household furnishings and operations (0.6 percent), recreation (0.9 percent), and new vehicles (1.3 percent). Indexes rising more rapidly include apparel (4.4 percent), medical care (3.6 percent), and used cars and trucks (3.5 percent).

Not seasonally adjusted CPI measures

The Consumer Price Index for All Urban Consumers (CPI-U) increased 1.7 percent over the last 12 months to an index level of 229.815 (1982-84=100). For the month, the index decreased 0.1 percent prior to seasonal adjustment.

The Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W) increased 1.6 percent over the last 12 months to an index level of 226.600 (1982-84=100). For the month, the index decreased 0.2 percent prior to seasonal adjustment.

The Chained Consumer Price Index for All Urban Consumers (C-CPI-U) increased 1.6 percent over the last 12 months. For the month, the index decreased 0.1 percent on a not seasonally adjusted basis. Please note that the indexes for the post-2010 period are subject to revision.

The Consumer Price Index for June 2012 is scheduled to be released on Tuesday, July 17, 2012, at 8:30 a.m. (EDT).

Facilities for Sensory Impaired

Information from this release will be made available to sensory impaired individuals upon request. Voice phone: 202-691-5200, Federal Relay Services: 1-800-877-8339.

Brief Explanation of the CPI

The Consumer Price Index (CPI) is a measure of the average change in prices over time of goods and services purchased by households. The Bureau of Labor Statistics publishes CPIs for two population groups: (1) the CPI for Urban Wage Earners and Clerical Workers (CPI-W), which covers households of wage earners and clerical workers that comprise approximately 29 percent of the total population and (2) the CPI for All Urban Consumers (CPI-U) and the Chained CPI for All Urban Consumers (C-CPI-U), which cover approximately 88 percent of the total population and include in addition to wage earners and clerical worker households, groups such as professional, managerial, and technical workers, the self-employed, short-term workers, the unemployed, and retirees and others not in the labor force.

The CPIs are based on prices of food, clothing, shelter, and fuels, transportation fares, charges for doctors' and dentists' services, drugs, and other goods and services that people buy for day-to-day living. Prices are collected each month in 87 urban areas across the country from about 4,000 housing units and approximately 26,000 retail establishments—department stores, supermarkets, hospitals, filling stations, and other types of stores and service establishments. All taxes directly associated with the purchase and use of items are included in the index. Prices of fuels and a few other items are obtained every month in all 87 locations. Prices of most other commodities and services are collected every month in the three largest geographic areas and every other month in other areas. Prices of most goods and services are obtained by personal visits or telephone calls of the Bureau's trained representatives.

In calculating the index, price changes for the various items in each location are averaged together with weights, which represent their importance in the spending of the appropriate population group. Local data are then combined to obtain a U.S. city average. For the CPI-U and CPI-W separate indexes are also published by size of city, by region of the country, for cross-classifications of regions and population-size classes, and for 27 local areas. Area indexes do not measure differences in the level of prices among cities; they only measure the average change in prices for each area since the base period. For the C-CPI-U data are issued only at the national level. It is important to note that the CPI-U and CPI-W are considered final when released, but the C-CPI-U is issued in preliminary form and subject to two annual revisions.

The index measures price change from a designed reference date. For the CPI-U and the CPI-W the reference base is 1982-84 equals 100. The reference base for the C-CPI-U is December 1999 equals 100. An increase of 16.5 percent from the reference base, for example, is shown as 116.500. This change can also be expressed in dollars as follows: the price of a base period market basket of goods and services in the CPI has risen from \$10 in 1982-84 to \$11.65.

For further details visit the CPI home page on the Internet at <http://www.bls.gov/cpi/> or contact our CPI Information and Analysis Section on (202) 691-7000.

Note on Sampling Error in the Consumer Price Index

The CPI is a statistical estimate that is subject to sampling error because it is based upon a sample of retail prices and not the complete universe of all prices. BLS calculates and publishes estimates of the 1-month, 2-month, 6-month and 12-month percent change standard errors annually, for the CPI-U. These standard error estimates can be used to construct confidence intervals for hypothesis testing. For example, the estimated standard error of the 1 month percent change is 0.03 percent for the U.S. All Items Consumer Price Index. This means that if we repeatedly sample from the universe of all retail prices using the same methodology, and estimate a percentage change for each sample, then 95% of these estimates would be within 0.06 percent of the 1 month percentage change based on all retail prices. For example, for a 1-month change of 0.2 percent in the All Items CPI for All Urban Consumers, we are 95 percent confident that the actual percent change based on all retail prices would fall between 0.14 and 0.26 percent. For the latest data, including information on how to use the estimates of standard error, see "Variance Estimates for Price Changes in the Consumer Price Index, January-December 2011". These data are available on the CPI home page (<http://www.bls.gov/cpi/>), or by using the following link <http://www.bls.gov/cpi/cpivar2011.pdf>

Calculating Index Changes

Movements of the indexes from one month to another are usually expressed as percent changes rather than changes in index points, because index point changes are affected by the level of the index in relation to its base period while percent changes are not. The example below illustrates the computation of index point and percent changes.

Percent changes for 3-month and 6-month periods are expressed as annual rates and are computed according to the standard formula for compound growth rates. These data indicate what the percent change would be if the current rate were maintained for a 12-month period.

Index Point Change

CPI
202.416
Less previous index
201.800
Equals index point change
.616

Percent Change

Index point difference
.616
Divided by the previous index
201.800
Equals
0.003
Results multiplied by one hundred
0.003x100
Equals percent change

0.3

Regions Defined

The states in the four regions are listed below.

The Northeast--Connecticut, Maine, Massachusetts, New Hampshire, New York, New Jersey, Pennsylvania, Rhode Island, and Vermont.

The Midwest--Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin.

The South--Alabama, Arkansas, Delaware, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia, and the District of Columbia.

The West--Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.

A Note on Seasonally Adjusted and Unadjusted Data

Because price data are used for different purposes by different groups, the Bureau of Labor Statistics publishes seasonally adjusted as well as unadjusted changes each month.

For analyzing general price trends in the economy, seasonally adjusted changes are usually preferred since they eliminate the effect of changes that normally occur at the same time and in about the same magnitude every year--such as price movements resulting from changing climatic conditions, production cycles, model changeovers, holidays, and sales.

The unadjusted data are of primary interest to consumers concerned about the prices they actually pay. Unadjusted data also are used extensively for escalation purposes. Many collective bargaining contract agreements and pension plans, for example, tie compensation changes to the Consumer Price Index before adjustment for seasonal variation.

Seasonal factors used in computing the seasonally adjusted indexes are derived by the X-12-ARIMA Seasonal Adjustment Method. Seasonally adjusted indexes and seasonal factors are computed annually. Each year, the last 5 years of seasonally adjusted data are revised. Data from January 2007 through December 2011 were replaced in January 2012. Exceptions to the usual revision schedule were: the updated seasonal data at the end of 1977 replaced data from 1967 through 1977; and, in January 2002, dependently seasonally adjusted series were revised for January 1987-December 2001 as a result of a change in the aggregation weights for dependently adjusted series. For further information, please see "Aggregation of Dependently Adjusted Seasonally Adjusted Series," in the October 2001 issue of the CPI Detailed Report.

Effective with the publication of data from January 2006 through December 2010 in January 2011, the Video and audio series and the Information technology, hardware and services series were changed from independently adjusted to dependently adjusted. This resulted in an increase in the number of seasonal components used in deriving seasonal movement of the All items and 54 other lower level

aggregations, from 73 for the publication of January 1998 through December 2005 data to 82 for the publication of seasonally adjusted data for January 2006 and later. Each year the seasonal status of every series is reevaluated based upon certain statistical criteria. If any of the 82 components change their seasonal adjustment status from seasonally adjusted to not seasonally adjusted, not seasonally adjusted data will be used in the aggregation of the dependent series for the last 5 years, but the seasonally adjusted indexes before that period will not be changed. Note: 38 of the 82 components are not seasonally adjusted for 2012.

Seasonally adjusted data, including the all items index levels, are subject to revision for up to five years after their original release. For this reason, BLS advises against the use of these data in escalation agreements.

Effective with the calculation of the seasonal factors for 1990, the Bureau of Labor Statistics has used an enhanced seasonal adjustment procedure called Intervention Analysis Seasonal Adjustment for some CPI series. Intervention Analysis Seasonal Adjustment allows for better estimates of seasonally adjusted data. Extreme values and/or sharp movements which might distort the seasonal pattern are estimated and removed from the data prior to calculation of seasonal factors. Beginning with the calculation of seasonal factors for 1996, X-12-ARIMA software was used for Intervention Analysis Seasonal Adjustment.

For the seasonal factors introduced in January 2012, BLS adjusted 31 series using Intervention Analysis Seasonal Adjustment, including selected food and beverage items, motor fuels, electricity and vehicles. For example, this procedure was used for the Motor fuel series to offset the effects of events such as damage to oil refineries from Hurricane Katrina.

For a complete list of Intervention Analysis Seasonal Adjustment series and explanations, please refer to the article "Intervention Analysis Seasonal Adjustment", located on our website at <http://www.bls.gov/cpi/cpisapage.htm>.

For additional information on seasonal adjustment in the CPI, please write to the Bureau of Labor Statistics, Division of Consumer Prices and Price Indexes, Washington, DC 20212 or contact David Levin at (202) 691-6968, or by e-mail at Levin.David@bls.gov. If you have general questions about the CPI, please call our information staff at (202) 691-7000.

- [Table 1. Consumer Price Index for All Urban Consumers \(CPI-U\): U. S. city average, by expenditure category](#)
- [Table 2. Consumer Price Index for All Urban Consumers \(CPI-U\): U. S. city average, by detailed expenditure category](#)
- [Table 3. Consumer Price Index for All Urban Consumers \(CPI-U\): U. S. city average, special aggregate indexes](#)

- [Table 4. Consumer Price Index for All Urban Consumers \(CPI-U\): Selected areas, all items index](#)
- [Table 5. Chained Consumer Price Index for All Urban Consumers \(C-CPI-U\) and the Consumer Price Index for All Urban Consumers \(CPI-U\): U.S. city average, all items index](#)
- [Table 6. Consumer Price Index for All Urban Consumers \(CPI-U\): U.S. city average, by expenditure category, 1-month analysis table](#)
- [Table 7. Consumer Price Index for All Urban Consumers \(CPI-U\): U.S. city average, by expenditure category, 12-month analysis table](#)
- [HTML version of the entire news release](#)

The PDF version of the news release

Table of Contents

Last Modified Date: June 14, 2012
RECOMMEND THIS PAGE USING:  Facebook  Twitter  LinkedIn

TOOLS Areas at a Glance Industries at a Glance Economic Releases Databases & Tables Maps	CALCULATORS Inflation Location Quotient Injury And Illness	HELP Help & Tutorials FAQs Glossary About BLS Contact Us	INFO What's New Careers @ BLS Find It! DOL Join our Mailing Lists Linking & Copyright Info
RESOURCES Inspector General (OIG) Budget and Performance No Fear Act USA.gov Benefits.gov Disability.gov	Freedom of Information Act Privacy & Security Statement Disclaimers Customer Survey Important Web Site Notices		

U.S. Bureau of Labor Statistics | Division of Consumer Prices and Price Indexes, PSB Suite 3130, 2 Massachusetts Avenue, NE Washington, DC 20212-0001
www.bls.gov/CPI | Telephone: 1-202-691-7000 | [Contact CPI](#)