

Variance Estimates for Price Changes in the Consumer Price Index January–December 2012

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This article presents variance estimates for 1-month, 2-month, 6-month, and 12-month percent changes in the Consumer Price Index for All Urban Consumers (CPI-U). Variance is a measure of the uncertainty caused by the use of a sample of retail prices, instead of the complete universe of retail prices. The estimates cover the period January 2012 through December 2012.¹ Each month the U.S. Bureau of Labor Statistics collects prices from a sample of approximately 83,400 commodities and services (C&S) quotes in approximately 25,600 outlets² around the United States for the Consumer Price Index (CPI).

The most commonly used measure of sampling variability is the *standard error* of the estimate – the square root of the variance. The standard error of the CPI's change can be used to construct confidence intervals to determine whether the change for a particular CPI series is significantly different from zero. This information should help users determine which index changes are significant.

Presentation of findings

The percent changes in the CPI along with their standard errors were estimated for the 12 months from January through December 2012. In summary, tables 1V through 5V show the median values of those percent changes, as well as the median values of the standard errors. Table 1V shows this information for U.S. city average, and tables 2V through 5V show the same information for the Northeast, Midwest, South, and West regions of the country.

For example, from January through December 2012, the 1-month changes in the U.S. city average all items index had a median value of 0.13 percent. The standard errors of those 12 estimates had a median value of 0.04 percent. Margins of error are usually expressed as a statistic's point estimate plus or minus two standard errors, so the margin of error on the CPI's 1-month change is approximately 0.13 percent plus or minus 0.08 percent. Therefore, in a typical 1-month period in 2012, the true change in the CPI was probably somewhere between 0.05 percent and 0.21 percent. The tables also show median percent changes and standard errors for 2- and 6-month intervals and for the full year 2012. Margins of error can be calculated for these intervals in the same way as for a 1-month period.

Analysis of findings

Analyzing the data reveals three significant observations. First, standard errors increase as one moves from the U.S. city average to individual regions of the country and from *all items* to individual item categories. Second, standard errors differ between item categories. Third, the standard errors decrease on a relative basis (standard error divided by price change), as the price change interval gets longer.

¹ In 1998 significant changes were made to the CPI's structure and sample, and a new variance calculation system was implemented. For information on variances from 1978-1986, 1993-1997 and then 1998 and 1999, see the *CPI Detailed Report* for February 1991, May 1994, February 1998, December 1999, and November 2000, respectively.

² In addition, BLS collects approximately 5,800 shelter quotes, used for both Rent and Rental Equivalence (REQ), each month.

The primary reason standard errors increase as one moves from the U.S. city average to individual regions of the country is that sample sizes differ. In general, smaller sample sizes lead to larger standard errors. For example, the U.S. city average all items index is computed each month from approximately 89,200 prices (including Rent and REQ quotes) throughout the United States, and its median standard error for 1-month changes is 0.04 percent. By contrast, the Northeast region all items index is computed from approximately 19,300 prices, and its median standard error is 0.07 percent. Regional indexes have larger standard errors because their sample sizes are smaller.

One can observe this same effect moving from the all items index to individual item categories. Again, the U.S. city average all items index is computed each month from approximately 89,200 prices, and its median 1-month standard error is 0.04 percent. By contrast, the U.S. city average recreation index is computed from approximately 5,400 prices, and its median 1-month standard error is 0.15 percent, nearly four times as large. Again, smaller sample sizes typically lead to larger standard errors.

The second significant observation is that standard errors differ between item categories. There are two reasons for this. First, item categories differ in sample size. For example, the U.S. city average food and beverages index is computed from approximately 35,500 prices each month, while the U.S. city average recreation index is computed from approximately 5,400 prices. Therefore, it is not surprising that the recreation index has larger standard errors. Second, there are real differences in item category price behaviors caused by different selling practices, seasonal influences, and consumer demand. This is especially true for the apparel category, in which it is common for the prices of individual items to fluctuate by 50 percent or more each month. As a result, standard errors for apparel indexes are large.

The third observation is that standard errors generally tend to decrease, on a relative basis (standard error divided by price change), as the price change interval gets longer. For the U.S. city average all items index, the median standard error divided by the median percent change is $0.04/0.13 = 0.31$ for 1-month changes, $0.06/0.29 = 0.21$ for 2-month changes, $0.07/0.98 = 0.07$ for 6-month changes, and $0.08/1.88 = 0.04$ for 12-month changes. This shows that the relative accuracy of percent changes in the CPI generally improves as the price change interval gets longer. On an absolute basis, standard errors tend to increase, but at a decreasing rate.

Findings presented here indicate that users should exercise caution when using CPI estimates to make inferences about index changes for relatively short time periods, for individual goods and services, or for local areas. The standard errors of those estimates may be on the same order of magnitude as the estimates themselves; and, thus, few inferences about them are reliable.

Sources of error

One way of analyzing the error in a survey estimate is to divide the total error into two sources: *sampling error* and *non-sampling error*. Sampling error is the uncertainty in the CPI caused by the fact that a sample of retail prices is used to compute the CPI, instead of using the complete universe of retail prices. Non-sampling error is the rest of the error. Non-sampling error includes things such as incorrect information given by survey respondents, data processing errors, and so forth. Non-sampling error arises regardless of whether data are collected from a sample of retail prices or from the complete universe.

Another way of analyzing error is to divide it into *variance* and *bias*. The variance of the CPI is a measure of how close different estimates of the CPI would be to each other if it were possible to repeat the survey over and over using different samples. Of course, it is not feasible to repeat the survey multiple times, but statistical theory allows the CPI's variance to be estimated anyway. A small variance, for example, indicates that multiple independent samples would produce values that are consistently very

close to each other. *Bias* is the difference between the CPI's *expected* value and its *true* value. A statistic may have a small variance but a large bias, or it may have a large variance but a small bias. For an index to be considered accurate, both its variance and bias need to be small.

The Bureau of Labor Statistics (BLS) is constantly trying to reduce the error in the CPI. Variance and sampling error are reduced by using a sample of retail prices that is as large as possible, given resource constraints. BLS has developed a model that optimizes the allocation of resources by indicating the number of prices that should be observed in each geographic area and each item category, in order to minimize the variance of the U.S. city average all items index. BLS reduces non-sampling error through a series of computerized and professional data reviews, as well as through continuous survey process improvements and theoretical research.

Replication and variance estimation

An important advantage of using sampling is that the CPI's variance can be estimated directly from the sample data. Starting in 1978, the CPI's sample design has accommodated variance estimation by using two or more independent samples of items and outlets in each geographic area. This allows two or more statistically independent estimates of the index to be made. The independent samples are called *replicates*, and the set of all observed prices is called the *full sample*.

BLS collects CPI data in 38 geographic areas across the United States. These areas consist of 31 *self-representing* areas and 7 *non-self-representing* areas. Self-representing areas are large metropolitan areas, such as the Boston, St. Louis, and San Francisco metropolitan areas. Non-self-representing areas are collections of smaller metropolitan areas. For example, one non-self-representing area is a collection of 32 small metropolitan areas in the Northeast region (Buffalo, Hartford, Providence, Bangor, and others), of which 8 were randomly selected to represent the entire set. Within each of the 38 areas, price data are collected for 211 item categories called *item strata*. Together the 211 item strata cover all consumer purchases. Examples of item strata are bananas, women's dresses, and electricity.

Multiplying the number of areas by the number of item strata gives 8,018 ($= 38 \times 211$) different area and item combinations for which price indexes need to be calculated. Separate price indexes are calculated for each one of these 8,018 area and item combinations. After all 8,018 of these *basic-level* indexes are calculated, they are aggregated to form *higher-level* indexes, using expenditure estimates from the Consumer Expenditure Survey as their weights. Examples of higher-level geographic areas are the four regions (Northeast, Midwest, South, and West); and examples of higher-level item categories are the eight major groups (food & beverages, housing, apparel, transportation, medical care, education and communication, recreation, and other goods and services). The highest level of geographic aggregation is the U.S. city average, and the highest level of item aggregation is all items.

Variances are computed with a Stratified Random Groups Method, in which variances are computed separately for certain subsets of areas and items and are then combined to produce the variance of the entire area and item combination. Subsets of items are formed by the intersection of the item category with each of the eight major groups.

Let $CPI(A, I, f, t)$ denote the index value where A = area, I = item category, f indicates that it is the full-sample value, and t = month; and let $CPI(A, I, f, t-k)$ denote the value of the same index in month $= t-k$. In general, the upper-case letter A denotes a *set* of areas, such as the Northeast or Midwest region of the country; and the upper-case letter I denotes a higher-level item category, such as all items or all items less food and energy. Also let $CPI(A, I, r, t)$ and $CPI(A, I, r, t-k)$ be the corresponding index values for replicate $= r$. Most areas have two replicates, but some have more. Then, the full-sample k-month percent change

between months $t-k$ and t is computed by dividing $CPI(A,I,f,t)$ by $CPI(A,I,f,t-k)$, subtracting 1, and multiplying by 100:

$$PC(A,I,f,t,t-k) = \left(\frac{CPI(A,I,f,t)}{CPI(A,I,f,t-k)} - 1 \right) \times 100$$

Every index has a weight $W(A,I,f)$ or $W(A,I,r)$ associated with it, which is used to combine the index with other indexes to produce indexes for larger geographic areas and larger item categories. For example, the weights are used to combine all 8,018 basic-level indexes into higher-level indexes such as the U.S. city average all items index. The product of an index and its weight is called a *cost weight*, $CW(A,I,r,t) = CPI(A,I,r,t) \times W(A,I,r)$, and is an estimate of the total cost in area $= A$ for consumption of item category $= I$ in month $= t$.

For the Stratified Random Groups method used here, replicate percent changes are defined as follows: full sample cost weights are used for every geographic area within area $= A$ except for one of the areas. In the omitted area, the full sample cost weight is replaced by a replicate cost weight. Let the lower case letter a denote one of the 38 basic-level areas included in area $= A$, and let the lower case letter i denote the intersection of item category $= I$ with one of the 8 major groups. Then, the replicate percent change, for area $= a$, item subset $= i$, replicate $= r$, between months $t-k$ and t , is computed as:

$$PC_S(a,i,r,t,t-k) = \left(\frac{CW(A,I,f,t) - CW(a,i,f,t) + CW(a,i,r,t)}{CW(A,I,f,t-k) - CW(a,i,f,t-k) + CW(a,i,r,t-k)} - 1 \right) \times 100$$

for self-representing areas. For non-self-representing areas, the replicate percent change, for area $= a$, item category $= I$, replicate $= r$, between months $t-k$ and t , is computed as:

$$PC_N(a,I,r,t,t-k) = \left(\frac{CW(A,I,f,t) - CW(a,I,f,t) + CW(a,I,r,t)}{CW(A,I,f,t-k) - CW(a,I,f,t-k) + CW(a,I,r,t-k)} - 1 \right) \times 100$$

where:

$$CW(A,I,f,t) = \sum_{a \subset A} \sum_{i \subset I} CW(a,i,f,t)$$

$$CW(A,I,f,t) = \sum_{a \subset A} CW(a,I,f,t)$$

$$CW(a,I,f,t) = \sum_{i \subset I} CW(a,i,f,t)$$

and likewise for replicates. The symbol " $a \subset A$ " means that the sum is over all basic-level areas within area $= A$, and the symbol $i \subset I$ means that the sum is over all item categories that are intersections of item category $= I$ with a major group.

Then, the variance is computed with the following Stratified Random Groups Variance Estimation Formula:

$$\begin{aligned} V[PC(A,I,f,t,t-k)] &= \sum_{i \subset I} \sum_{a \subset A \cap S} \frac{1}{R_a(R_a - 1)} \sum_{r=1}^{R_a} (PC_S(a,i,r,t,t-k) - PC(A,I,t,t-k))^2 \\ &+ \sum_{a \subset A \cap N} \frac{1}{R_a(R_a - 1)} \sum_{r=1}^{R_a} (PC_N(a,I,r,t,t-k) - PC(A,I,t,t-k))^2 \end{aligned}$$

where S and N are the sets of all self-representing and non-self-representing areas in the CPI's geographic sample, respectively; and $A \cap S$ and $A \cap N$ are the sets of all self-representing and non-self-representing areas within area = A . The number R_a is the number of replicates in area = a .

Finally, the standard error of the percent change is computed by taking the square root of its variance:

$$SE[PC(A, I, f, t, t-k)] = \sqrt{V[PC(A, I, f, t, t-k)]}.$$

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Table 1V. U.S. city average, median price change and median price change standard error for the Consumer Price Index for All Urban Consumers (CPI-U), by detailed expenditure categories for 1-, 2-, 6-, and 12-month intervals, 2012

Item and group	U.S. city average							
	1 Month		2 Month		6 Month		12 Month	
	Median price change	Median standard error	Median price change	Median standard error	Median price change	Median standard error	Median price change	Median standard error
Expenditure category								
All items	0.13	0.04	0.29	0.05	0.98	0.07	1.88	0.08
Food and beverages	.11	.07	.24	.08	.85	.10	2.48	.13
Food	.11	.08	.25	.09	.87	.11	2.53	.14
Food at home	.04	.12	.16	.13	.63	.16	2.29	.18
Cereals and bakery products	.16	.30	.12	.33	.58	.36	2.74	.42
Cereals and cereal products	.02	.45	.05	.50	.20	.51	2.87	.60
Flour and prepared flour mixes	-.02	.73	.30	.81	2.09	.95	5.46	1.21
Breakfast cereal	-.15	.65	-.06	.68	.15	.75	2.07	.83
Rice, pasta, cornmeal	.00	.60	-.18	.71	-.71	.85	3.27	1.09
Rice	-.16	.65	-.38	.68	-.20	1.05	2.35	1.31
Bakery products	.19	.40	.26	.43	.92	.51	2.73	.56
Bread	.18	.78	.28	.85	.81	1.02	2.29	1.06
White bread	-.25	1.36	.48	1.34	1.15	1.57	2.31	1.51
Bread other than white	.38	1.25	-.33	1.17	.39	1.27	2.58	1.42
Fresh biscuits, rolls, muffins	.15	.76	.27	.76	.36	.88	2.32	1.04
Cakes, cupcakes, and cookies	-.07	.76	.18	.80	1.48	.98	3.93	1.40
Cookies	-.19	1.09	.16	1.10	1.64	1.23	5.10	1.33
Fresh cakes and cupcakes	.20	.99	.57	1.07	1.62	1.32	3.81	2.04
Other bakery products	.09	.76	.26	.82	.82	.91	2.34	.99
Fresh sweetrolls, coffeecakes, doughnuts	.72	1.27	.93	1.21	2.23	1.53	3.74	1.52
Crackers, bread, and cracker products	.30	1.47	.23	1.44	1.40	1.58	2.69	1.68
Frozen and refrigerated bakery products, pies, tarts, turnovers	-.17	.98	-.14	.95	.31	1.27	1.82	1.47
Meats, poultry, fish, and eggs	.29	.23	.24	.26	1.07	.30	3.05	.32
Meats, poultry, and fish	.11	.24	.20	.27	1.30	.31	3.03	.34
Meats	.12	.29	.18	.31	.90	.37	2.80	.42
Beef and veal	.44	.39	.97	.43	3.16	.54	5.82	.66
Uncooked ground beef	.16	.54	.67	.62	3.25	.75	6.67	.97
Uncooked beef roasts	.03	.96	.88	1.08	2.53	1.22	5.29	1.43
Uncooked beef steaks	.24	.66	.36	.78	3.13	.87	5.88	1.04
Uncooked other beef and veal	.48	1.06	.64	1.04	1.79	1.14	3.90	1.39
Pork	-.23	.50	-.67	.54	-.99	.62	-.64	.75
Bacon, breakfast sausage, and related products	-.27	.70	-.91	.76	-.93	.94	-.71	1.21
Bacon and related products	-.24	1.16	-.96	1.24	.19	1.87	-.43	2.88
Breakfast sausage and related products	-.71	1.15	-1.01	1.13	.29	1.48	1.75	1.86
Ham	-.58	1.02	.26	1.21	-.98	1.43	1.26	1.67
Ham, excluding canned	-.61	1.19	.19	1.39	-1.41	1.53	1.51	2.00
Pork chops	-.14	.98	-.22	1.07	-.94	1.11	.96	1.30
Other pork including roasts and picnics	-.36	1.11	-.81	1.21	-2.44	1.39	-2.46	1.68
Other meats	-.05	.62	-.06	.69	-.27	.78	1.27	.91
Frankfurters	-.13	1.74	.72	1.74	.68	2.42	1.89	2.71
Lunchmeats	.13	.57	-.28	.64	-.32	.71	.72	.73
Lamb and organ meats	-.59	.95	-1.02	1.25	-2.89	1.63	-1.80	2.47
Lamb and mutton	-1.74	1.30	-3.06	2.03	-7.79	3.06	-5.63	4.15
Poultry	.54	.67	1.13	.72	2.78	.76	5.56	.92
Chicken	.67	.81	1.19	.83	2.60	.88	5.28	1.10
Fresh whole chicken	.66	1.36	1.38	1.47	1.75	1.58	3.75	2.04
Fresh and frozen chicken parts	.32	.90	1.36	1.02	3.24	.98	5.37	1.09
Other poultry including turkey	.86	.86	.81	1.05	3.14	1.07	8.29	1.32
Fish and seafood	.12	.53	-.18	.57	.80	.75	1.61	.89
Fresh fish and seafood	-.19	.82	-.20	.81	-.04	1.00	-.04	1.25
Processed fish and seafood	.14	.64	.38	.79	1.61	.98	3.81	1.06
Shelf stable fish and seafood	.34	1.02	1.03	1.03	3.14	1.54	6.43	1.58
Frozen fish and seafood	-.21	.92	-.17	1.20	.48	1.73	2.41	2.02
Eggs	.64	.81	1.10	.96	2.08	1.15	2.78	1.05
Dairy and related products	-.03	.29	-.01	.32	-.64	.40	.98	.49
Milk	.12	.36	-.05	.40	-1.34	.51	.28	.61
Fresh whole milk	-.02	.59	-.02	.68	-1.17	.81	-.27	.73
Fresh milk other than whole	-.01	.45	.06	.53	-1.27	.59	.57	.74
Cheese and related products	.08	.59	-.14	.67	-.98	.73	1.05	.88
Ice cream and related products	-.25	.89	-.51	.94	.04	.99	2.89	1.33
Other dairy and related products	-.10	.62	-.22	.72	.51	.83	3.12	1.07

Table 1V. U.S. city average, median price change and median price change standard error for the Consumer Price Index for All Urban Consumers (CPI-U), by detailed expenditure categories for 1-, 2-, 6-, and 12-month intervals, 2012-Continued

Item and group	U.S. city average							
	1 Month		2 Month		6 Month		12 Month	
	Median price change	Median standard error	Median price change	Median standard error	Median price change	Median standard error	Median price change	Median standard error
Expenditure category								
Fruits and vegetables	0.35	0.33	0.70	0.39	0.12	0.47	-0.51	0.52
Fresh fruits and vegetables	.49	.40	.74	.49	-.44	.57	-1.92	.63
Fresh fruits	.62	.63	1.13	.73	.71	.86	.98	.97
Apples	1.05	1.15	1.88	1.34	5.06	1.70	6.26	2.09
Bananas	-.11	.71	-.27	.80	-.60	.90	-.57	1.06
Citrus fruits	-.26	1.30	1.61	1.50	-1.04	1.88	.01	2.07
Oranges, including tangerines	-.39	1.92	.88	2.06	.89	2.60	.03	2.20
Other fresh fruits	1.02	1.12	2.67	1.28	2.00	1.50	1.24	1.62
Fresh vegetables	.09	.60	-.02	.64	-2.16	.79	-3.98	.82
Potatoes	-.65	1.25	-.87	1.34	-5.80	1.57	-6.08	1.65
Lettuce	.37	1.57	1.18	1.75	-1.24	1.83	-3.73	1.83
Tomatoes	.13	1.57	-1.30	1.99	-2.09	2.03	-4.51	1.96
Other fresh vegetables	.41	.88	.22	1.01	-.35	1.21	-1.56	1.23
Processed fruits and vegetables	.02	.47	-.01	.53	.98	.60	4.53	.66
Canned fruits and vegetables	.09	.67	.27	.75	.59	.86	3.08	.92
Canned fruits	.18	.99	.46	1.10	1.24	1.10	3.23	1.28
Canned vegetables	-.20	.97	.19	1.08	.00	1.02	2.94	1.36
Frozen fruits and vegetables	-.31	.92	-.59	1.02	.49	1.13	5.61	1.31
Frozen vegetables	-.25	.90	-.90	1.11	1.74	1.45	5.78	1.60
Other processed fruits and vegetables including dried	.24	.60	.22	.74	1.89	1.08	5.92	1.61
Dried beans, peas, and lentils	-.27	.70	.10	.94	2.63	1.46	14.74	2.36
Nonalcoholic beverages and beverage materials	-.15	.37	-.23	.40	-.19	.45	.65	.53
Juices and nonalcoholic drinks	-.09	.45	-.12	.51	.12	.55	1.13	.65
Carbonated drinks	-.19	.70	-.49	.71	.17	.74	1.18	.90
Frozen noncarbonated juices and drinks	-.04	.54	.00	.82	-.29	1.07	6.43	1.80
Nonfrozen noncarbonated juices and drinks	-.08	.65	.09	.67	.05	.79	.92	.86
Beverage materials including coffee and tea	-.22	.46	-.51	.54	-1.37	.68	-.34	.89
Coffee	-.30	.64	-1.00	.72	-2.15	.90	-1.52	1.08
Roasted coffee	-.51	.79	-.89	.86	-2.41	.95	-2.06	1.14
Instant and freeze dried coffee	-.14	.68	-1.06	1.74	-.67	1.25	.93	1.50
Other beverage materials including tea	.00	.59	-.09	.69	.00	.98	.60	1.37
Other food at home	.12	.24	.24	.27	1.56	.33	3.89	.42
Sugar and sweets	.27	.55	-.06	.61	.91	.79	4.11	.91
Sugar and artificial sweeteners	-.27	.51	-.63	.59	-.39	.79	2.05	.99
Candy and chewing gum	.24	.83	-.02	.92	1.19	1.24	4.24	1.49
Other sweets	.28	.61	.16	.79	1.75	.89	3.59	1.13
Fats and oils	-.04	.46	-.16	.52	1.27	.63	5.47	1.02
Butter and margarine	-.46	.77	.19	.87	-.79	.90	-.70	1.12
Butter	-.62	1.32	.31	1.18	-4.57	1.63	-8.37	1.95
Margarine	.21	1.11	.22	1.15	.83	1.34	6.73	1.55
Salad dressing	.16	.78	.19	.87	-.48	1.00	1.73	1.14
Other fats and oils including peanut butter	.18	.78	.29	.87	3.79	1.21	13.19	1.99
Peanut butter	.59	.85	.59	1.07	9.78	1.88	35.80	2.58
Other foods	.14	.30	.37	.33	1.60	.40	3.58	.50
Soups	.17	1.13	.41	1.21	.37	1.30	2.95	1.37
Frozen and freeze dried prepared foods	-.09	.67	.06	.76	.18	.93	.70	1.12
Snacks	.39	.71	.79	.78	2.79	.95	6.67	1.03
Spices, seasonings, condiments, sauces	.10	.71	-.05	.80	.75	.86	2.39	.90
Salt and other seasonings and spices	-.22	.92	-.61	1.38	1.22	2.42	6.88	1.65
Olives, pickles, relishes	-.20	.57	.12	.96	.01	.79	.80	1.61
Sauces and gravies	.61	1.21	-.05	1.75	.55	1.77	1.28	1.39
Other condiments	.05	.62	-.30	.84	.74	1.27	3.46	1.75
Baby food	.07	.47	.31	.51	.97	.60	4.03	.86
Other miscellaneous foods	.10	.48	.45	.56	1.60	.85	3.43	1.04
Prepared salads	-.07	.73	.45	.90	2.05	1.37	3.53	1.41
Food away from home	.21	.05	.47	.08	1.35	.12	2.90	.18
Full service meals and snacks	.19	.07	.39	.10	1.25	.15	2.64	.23
Limited service meals and snacks	.21	.07	.46	.11	1.64	.20	3.23	.25
Food at employee sites and schools	.11	.14	.26	.26	.89	.85	3.39	.60
Food at elementary and secondary schools	.05	.07	.15	.27	.48	1.04	3.39	.76
Food from vending machines and mobile vendors	.05	.26	.34	.37	1.02	.76	3.53	.84

Table 1V. U.S. city average, median price change and median price change standard error for the Consumer Price Index for All Urban Consumers (CPI-U), by detailed expenditure categories for 1-, 2-, 6-, and 12-month intervals, 2012-Continued

Item and group	U.S. city average							
	1 Month		2 Month		6 Month		12 Month	
	Median price change	Median standard error	Median price change	Median standard error	Median price change	Median standard error	Median price change	Median standard error
Expenditure category								
Other food away from home	0.12	0.12	0.39	0.19	1.16	0.42	2.23	0.61
Alcoholic beverages	.10	.17	.20	.26	.87	.31	1.83	.32
Alcoholic beverages at home	.05	.24	.07	.33	.38	.38	.85	.40
Beer, ale, and other malt beverages at home	.11	.25	.29	.36	.80	.46	1.69	.55
Distilled spirits at home	-.08	.35	-.01	.66	-.03	.69	-.01	.69
Whiskey at home	.16	.56	.16	.82	-.03	1.16	1.26	1.29
Distilled spirits, excluding whiskey, at home	-.07	.41	.09	.49	-.09	.67	-.21	.97
Wine at home	.03	.40	-.07	.55	.08	.72	.01	.70
Alcoholic beverages away from home	.22	.27	.33	.39	1.40	.50	3.07	.56
Beer, ale, and other malt beverages away from home	.21	.17	.37	.24	1.05	.40	1.82	.44
Wine away from home	.23	.33	.54	.58	1.39	.81	3.00	1.03
Distilled spirits away from home	.36	.31	.40	.71	1.67	.83	3.51	1.04
Housing	.12	.05	.28	.08	.87	.13	1.68	.13
Shelter	.17	.05	.37	.06	1.12	.13	2.20	.14
Rent of primary residence	.21	.05	.44	.09	1.37	.20	2.68	.18
Lodging away from home	-.22	1.00	1.57	1.18	.74	1.68	2.43	1.35
Housing at school, excluding board	.12	.05	.18	.07	1.97	.22	3.94	.27
Other lodging away from home including hotels and motels	-.33	1.24	1.91	1.44	.41	2.06	2.01	1.67
Owners' equivalent rent of residences	.18	.04	.35	.05	1.04	.11	2.05	.15
Owners' equivalent rent of primary residence	.18	.04	.35	.05	1.03	.11	2.05	.15
Tenants' and household insurance	.24	.26	.36	.51	1.48	.66	3.23	.78
Fuels and utilities	-.10	.18	-.06	.31	-.05	.43	-.78	.35
Household energy	-.17	.16	-.33	.34	-.87	.49	-2.48	.30
Fuel oil and other fuels	.71	.34	.98	.49	-1.14	.51	-1.38	.64
Fuel oil	.55	.44	1.17	.64	1.10	.62	3.12	.61
Propane, kerosene, and firewood	-.48	.46	-.91	.70	-6.25	.96	-8.86	1.17
Energy services	-.29	.18	-.20	.37	-.84	.53	-2.70	.31
Electricity	-.17	.21	-.35	.46	-.56	.67	-.15	.41
Utility (piped) gas service	.01	.26	-.91	.35	-6.57	.65	-10.25	.49
Water and sewer and trash collection services	.40	.16	1.00	.21	2.86	.65	5.52	.73
Water and sewerage maintenance	.40	.18	1.19	.27	3.32	.85	6.54	.92
Garbage and trash collection	.18	.21	.44	.28	1.32	.59	2.54	.71
Household furnishings and operations	.00	.12	-.05	.19	.45	.22	.71	.29
Window and floor coverings and other linens	-.28	.42	-.57	.65	-2.00	.81	-3.72	1.19
Floor coverings	-.37	.41	-.60	.59	-1.84	.80	-1.82	1.34
Window coverings	.07	.64	.27	.78	.51	1.19	.15	2.26
Other linens	-.37	.70	-.94	1.07	-3.27	1.27	-6.28	1.60
Furniture and bedding	-.09	.34	.06	.49	.59	.75	1.66	.96
Bedroom furniture	-.14	.43	-.12	.63	-.10	1.00	.82	1.45
Living room, kitchen, and dining room furniture	.16	.48	.22	.65	1.22	.83	2.34	1.09
Other furniture	-.20	.82	.71	1.28	2.01	2.68	1.85	3.19
Infants' furniture	.44	1.02	-.14	1.88	1.26	2.81	3.61	3.29
Appliances	-.11	.36	-.18	.48	1.17	.65	2.74	.80
Major appliances	.07	.49	.20	.64	2.94	.90	5.92	1.11
Laundry equipment	.43	.68	.49	.94	4.86	1.24	9.13	1.59
Other appliances	-.22	.47	-.35	.67	-1.02	.84	-1.67	1.03
Other household equipment and furnishings	-.01	.53	-.22	1.01	-1.85	.81	-4.08	1.01
Clocks, lamps, and decorator items	-.20	.84	-.54	1.53	-2.42	1.42	-5.63	1.85
Indoor plants and flowers	-.13	.69	.31	.89	-.16	1.16	-.46	1.43
Dishes and flatware	-.25	1.15	-.79	1.87	-3.72	1.96	-8.12	2.69
Nonelectric cookware and tableware	-.02	.64	.17	.84	-.57	1.14	-.18	1.38
Tools, hardware, outdoor equipment and supplies	-.03	.26	.25	.37	.54	.48	.30	.56
Tools, hardware and supplies	.06	.45	.04	.56	.51	.67	1.37	.79
Outdoor equipment and supplies	-.06	.33	.35	.49	.48	.67	-.17	.86
Housekeeping supplies	.00	.22	.16	.30	.19	.35	2.88	.49
Household cleaning products	-.07	.38	.03	.57	-.31	.66	2.22	.83
Household paper products	.15	.41	.18	.53	1.30	.65	3.79	.90
Miscellaneous household products	.00	.41	-.02	.51	.53	.70	2.72	.93
Household operations	.13	.14	.36	.21	1.17	.35	2.29	.40
Domestic services	.08	.13	.26	.15	.80	.39	1.53	.56

Table 1V. U.S. city average, median price change and median price change standard error for the Consumer Price Index for All Urban Consumers (CPI-U), by detailed expenditure categories for 1-, 2-, 6-, and 12-month intervals, 2012-Continued

Item and group	U.S. city average							
	1 Month		2 Month		6 Month		12 Month	
	Median price change	Median standard error	Median price change	Median standard error	Median price change	Median standard error	Median price change	Median standard error
Expenditure category								
Gardening and lawn care services	0.06	0.08	0.27	0.15	0.82	0.28	1.76	0.46
Moving, storage, freight expense	.34	.78	.05	1.21	2.18	1.78	3.35	1.94
Repair of household items	.34	.25	.85	.42	2.48	.56	5.66	.78
Apparel	.17	.50	.11	.76	1.26	.92	3.42	1.24
Men's and boys' apparel	.22	.75	.90	1.03	1.57	1.61	4.17	1.51
Men's apparel	.69	.91	.88	1.21	1.39	1.78	3.67	1.80
Men's suits, sport coats, and outerwear	.58	1.84	.31	2.76	.11	3.19	2.45	3.64
Men's furnishings	.31	.96	.49	1.34	1.97	1.82	5.22	2.22
Men's shirts and sweaters	-.70	1.76	.70	2.60	1.19	3.77	4.14	3.78
Men's pants and shorts	-.03	1.62	-.64	2.01	1.85	4.65	4.92	5.37
Boys' apparel	.14	1.53	-.01	2.28	2.56	3.12	5.60	3.27
Women's and girls' apparel	-.12	.84	-.49	1.35	.70	1.72	3.93	2.35
Women's apparel	.16	.93	.18	1.44	1.22	1.78	3.44	2.33
Women's outerwear	-1.41	3.65	-4.12	5.39	-6.26	7.03	2.70	9.60
Women's dresses	-3.73	3.44	-6.42	6.07	-.56	8.34	2.65	9.85
Women's suits and separates	.96	1.04	.76	1.46	1.78	2.13	2.65	2.68
Women's underwear, nightwear, sportswear and accessories ...	-.38	1.07	.09	1.47	-.11	2.05	2.84	2.45
Girls' apparel	-2.14	1.95	-4.06	2.93	.85	5.58	6.57	5.90
Footwear	.51	.76	.61	.94	1.97	1.35	2.67	1.50
Men's footwear	.43	1.10	.74	1.29	2.21	1.73	2.97	2.16
Boys' and girls' footwear	.22	1.28	.62	1.75	.84	2.61	1.15	3.03
Women's footwear	.89	1.01	.15	1.56	1.99	2.24	3.69	2.49
Infants' and toddlers' apparel	-.20	.86	.08	1.30	1.20	1.85	5.92	1.97
Jewelry and watches	-.52	.94	-.06	1.24	.22	1.80	.25	2.79
Watches	.71	1.17	.39	1.69	.86	2.47	1.16	2.80
Jewelry	-.61	1.03	-.60	1.53	-.14	1.99	-.22	3.25
Transportation	.17	.07	.24	.08	1.03	.11	2.22	.13
Private transportation	.08	.06	.17	.09	.99	.11	2.31	.12
New and used motor vehicles	.04	.08	-.05	.11	-.21	.16	.59	.21
New vehicles	.07	.10	.16	.14	.52	.21	1.38	.29
New cars and trucks	.07	.11	.16	.15	.52	.21	1.36	.25
New cars	.05	.10	.12	.16	.32	.27	.96	.27
New trucks	.12	.13	.24	.18	.79	.23	1.97	.34
Used cars and trucks	-.26	.01	-.53	.03	-1.06	.09	1.69	.22
Leased cars and trucks	-.68	.51	-.73	.71	-2.44	.98	-5.34	1.13
Car and truck rental	.78	1.28	-1.10	1.79	.15	2.05	.16	2.28
Motor fuel	-.14	.14	.69	.17	.74	.19	2.61	.16
Gasoline (all types)	-.15	.15	.66	.17	.83	.20	2.57	.16
Gasoline, unleaded regular	-.18	.53	.69	.63	.71	.66	2.53	.72
Gasoline, unleaded midgrade	-.37	.51	.30	.60	1.24	.63	2.83	.64
Gasoline, unleaded premium	.16	.55	.84	.62	1.13	.64	2.89	.63
Other motor fuels	-.27	.16	-.15	.20	-.11	.21	1.66	.23
Motor vehicle parts and equipment	.03	.20	.13	.22	.66	.30	2.77	.43
Tires	.05	.23	-.09	.29	.34	.38	2.82	.57
Vehicle accessories other than tires	.03	.31	.33	.36	1.15	.42	2.69	.61
Vehicle parts and equipment other than tires	.15	.31	.47	.35	1.19	.51	1.97	.61
Motor oil, coolant, and fluids	.07	.58	.45	.71	1.52	.74	7.48	1.00
Motor vehicle maintenance and repair	.12	.11	.26	.15	.58	.22	1.91	.31
Motor vehicle body work	.18	.14	.38	.21	1.01	.31	1.93	.37
Motor vehicle maintenance and servicing	.16	.14	.33	.20	.91	.33	2.30	.44
Motor vehicle repair	.05	.16	.08	.21	.31	.36	1.56	.48
Motor vehicle insurance	.29	.18	.56	.26	1.94	.44	3.30	.50
Motor vehicle fees	.07	.06	.15	.12	1.08	.35	2.95	.59
State motor vehicle registration and license fees	.00	.01	.01	.11	.00	.19	.52	.69
Parking and other fees	.20	.10	.37	.15	3.12	.67	6.50	.96
Parking fees and tolls	.19	.15	.42	.28	4.10	1.67	8.68	2.88
Automobile service clubs	.07	.20	.17	.20	1.30	.72	1.75	.78
Public transportation	.49	.32	.63	.43	-.44	.57	.85	.79
Airline fare	.53	.45	.70	.62	-1.28	.81	.51	1.12

Table 1V. U.S. city average, median price change and median price change standard error for the Consumer Price Index for All Urban Consumers (CPI-U), by detailed expenditure categories for 1-, 2-, 6-, and 12-month intervals, 2012-Continued

Item and group	U.S. city average							
	1 Month		2 Month		6 Month		12 Month	
	Median price change	Median standard error	Median price change	Median standard error	Median price change	Median standard error	Median price change	Median standard error
Expenditure category								
Other intercity transportation	0.05	0.80	-0.45	1.07	0.26	1.61	-0.98	1.87
Intercity bus fare	.75	.43	.95	.72	1.96	1.24	3.66	1.37
Intercity train fare	1.11	1.49	4.04	1.86	2.39	2.39	-.04	2.26
Ship fare	-.17	.59	-.32	1.05	-1.87	1.61	-2.75	1.86
Intracity transportation	.11	.11	.53	.25	1.93	.52	3.25	.70
Intracity mass transit	.07	.06	.25	.24	1.64	.98	2.59	1.18
Medical care	.25	.08	.51	.13	2.03	.20	3.59	.24
Medical care commodities	.04	.17	.28	.25	1.67	.37	3.11	.45
Medicinal drugs	.03	.18	.31	.25	1.69	.39	3.24	.47
Prescription drugs	.05	.18	.31	.26	1.92	.43	3.69	.57
Nonprescription drugs	-.03	.47	.22	.62	.47	.74	.76	.88
Medical equipment and supplies	.08	.43	.49	.58	.75	.72	1.01	.91
Medical care services	.30	.07	.62	.12	2.15	.21	3.81	.27
Professional services	.15	.08	.38	.11	1.00	.24	1.99	.31
Physicians' services	.14	.13	.29	.19	1.10	.43	2.23	.56
Dental services	.20	.09	.43	.13	1.24	.26	2.38	.30
Eyeglasses and eye care	-.10	.21	-.15	.28	.19	.40	.59	.60
Services by other medical professionals	.05	.08	.15	.14	.54	.28	.98	.37
Hospital and related services	.38	.14	.82	.21	2.42	.31	4.74	.39
Hospital services	.42	.16	.86	.24	2.52	.36	5.11	.45
Inpatient hospital services	.33	.21	.75	.39	2.38	.53	5.22	.63
Outpatient hospital services	.39	.33	.84	.48	2.53	.68	4.91	.88
Nursing homes and adult day services	.14	.08	.40	.13	1.91	.30	3.72	.40
Care of invalids and elderly at home	.05	.08	.15	.14	.56	.31	1.12	.54
Health insurance	.81	.08	1.74	.15	7.03	.25	12.56	.33
Recreation	.01	.15	.12	.24	.63	.30	1.25	.43
Video and audio	.00	.16	.05	.23	.64	.29	1.14	.68
Televisions	-1.35	.61	-3.04	.77	-9.66	1.11	-18.07	1.38
Cable and satellite television and radio service	.27	.17	.52	.25	2.61	.33	4.39	.80
Other video equipment	-1.20	.80	-2.06	1.05	-6.21	1.38	-12.07	1.68
Video discs and other media, including rental of video and audio	-.32	.75	-.75	1.16	-1.25	1.36	1.72	2.59
Video discs and other media	-.78	.85	-1.49	1.22	-3.75	2.32	-6.02	2.84
Rental of video or audio discs and other media	-.21	.33	-.03	.63	.29	1.01	8.87	3.24
Audio equipment	-.55	.49	-1.23	.65	-3.81	.99	-6.99	1.40
Audio discs, tapes and other media	-.24	.41	-.55	.63	-1.57	.94	-3.57	1.25
Pets, pet products and services	.18	.24	.33	.31	1.00	.41	2.38	.51
Pets and pet products	.18	.39	.41	.49	.72	.64	1.88	.81
Pet food	.32	.44	.66	.53	.93	.71	3.18	.82
Purchase of pets, pet supplies, accessories	-.10	.64	-.33	.74	-.14	1.15	-.10	1.73
Pet services including veterinary	.19	.13	.40	.19	1.36	.34	2.98	.54
Pet services	.14	.19	.43	.25	1.21	.43	2.54	.59
Veterinarian services	.14	.15	.49	.29	1.25	.66	2.83	.84
Sporting goods	.11	.30	.23	.45	.42	.68	.03	.94
Sports vehicles including bicycles	.24	.30	.35	.50	.72	.66	1.49	.72
Sports equipment	-.11	.46	.04	.69	-.23	1.26	-1.02	1.82
Photography	-.26	.35	-.14	.47	-.83	.79	-.39	1.06
Photographic equipment and supplies	-.60	.62	-.18	.81	-2.70	1.24	-3.87	1.70
Film and photographic supplies	.13	.59	1.45	1.15	5.63	2.04	9.33	3.74
Photographic equipment	-.52	.80	-.43	1.20	-3.77	1.61	-5.82	1.97
Photographers and film processing	.00	.32	.09	.46	.54	.74	1.75	1.12
Photographer fees	.03	.13	.10	.23	.39	.55	1.25	.95
Film processing	-.01	.40	.06	.63	.57	.76	2.12	.88
Other recreational goods	-.55	.44	-.87	.63	-1.74	.89	-3.62	1.15
Toys	-.80	.53	-1.08	.76	-2.72	1.05	-5.30	1.40
Toys, games, hobbies and playground equipment	-.72	.63	-.46	.91	-1.16	1.20	-2.06	1.67
Sewing machines, fabric and supplies	.52	.91	.66	1.21	1.47	1.81	2.79	1.95
Music instruments and accessories	.06	.40	.31	.71	.53	1.30	.60	1.65
Other recreation services	.08	.43	.29	.72	1.54	.81	2.13	1.05
Club dues and fees for participant sports and group exercises	.00	.46	.20	.82	.90	1.43	3.04	1.53

Table 1V. U.S. city average, median price change and median price change standard error for the Consumer Price Index for All Urban Consumers (CPI-U), by detailed expenditure categories for 1-, 2-, 6-, and 12-month intervals, 2012-Continued

Item and group	U.S. city average							
	1 Month		2 Month		6 Month		12 Month	
	Median price change	Median standard error	Median price change	Median standard error	Median price change	Median standard error	Median price change	Median standard error
Expenditure category								
Admissions	0.13	0.76	0.27	1.03	1.88	1.26	2.34	1.57
Admission to movies, theaters, and concerts	.16	.59	.34	.78	1.80	1.04	2.06	1.28
Admission to sporting events	.33	.77	1.10	.90	1.85	1.18	3.43	1.38
Fees for lessons or instructions	.13	.26	.51	.44	.71	.78	.57	.99
Recreational reading materials	.24	.35	.28	.44	1.31	.68	2.17	1.08
Newspapers and magazines	.80	.52	1.10	.72	2.53	1.06	5.30	1.21
Recreational books	-.16	.39	-.31	.55	-.62	.95	-1.84	1.85
Education and communication	.08	.06	.15	.08	.76	.16	1.88	.20
Education	.09	.08	.16	.11	1.89	.24	4.30	.34
Educational books and supplies	.43	.33	.86	.42	3.70	.71	6.08	1.00
Tuition, other school fees, and childcare	.06	.08	.14	.11	1.77	.27	4.20	.36
College tuition and fees	.01	.13	.12	.19	2.07	.42	5.29	.57
Elementary and high school tuition and fees	.07	.06	.13	.07	1.71	.27	3.60	.38
Child care and nursery school	.10	.11	.28	.17	1.15	.38	2.40	.39
Technical and business school tuition and fees	.15	.16	.53	.29	1.56	.72	4.11	.94
Communication	-.02	.08	.02	.11	-.06	.17	-.48	.22
Postage and delivery services	.04	.02	.08	.03	1.86	.10	3.83	.10
Postage	.00	.00	.00	.00	1.87	.10	3.75	.10
Delivery services	.23	.24	.91	.29	1.75	.44	4.95	.52
Information and information processing	-.02	.08	.02	.11	-.14	.18	-.65	.24
Telephone services	.08	.05	.17	.07	.26	.12	.39	.20
Wireless telephone services	.00	.04	.03	.06	-.27	.16	-.72	.29
Land-line telephone services	.12	.09	.29	.17	1.12	.21	2.10	.28
Information technology, hardware and services	-.27	.22	-.44	.31	-1.47	.51	-3.41	.68
Personal computers and peripheral equipment	-.94	.48	-2.09	.67	-4.08	1.22	-9.08	1.47
Computer software and accessories	-.63	.75	-1.62	1.04	-3.32	1.52	-4.59	1.80
Internet services and electronic information providers	.08	.26	.04	.41	.11	.65	.17	.78
Telephone hardware, calculators, and other consumer information items	-.30	.50	-1.06	.70	-2.84	1.23	-5.41	1.82
Other goods and services	.09	.11	.16	.15	.97	.22	1.85	.27
Tobacco and smoking products	.10	.15	.07	.19	1.20	.39	2.30	.49
Cigarettes	.07	.16	.06	.20	1.21	.42	2.19	.54
Tobacco products other than cigarettes	.18	.32	.26	.45	.78	.69	2.37	.96
Personal care	.10	.13	.19	.18	.97	.26	1.71	.33
Personal care products	.12	.33	-.17	.47	.74	.59	1.13	.66
Hair, dental, shaving, and miscellaneous personal care products	-.01	.52	.14	.71	.73	.83	.72	.95
Cosmetics, perfume, bath, nail preparations and implements	-.18	.43	-.10	.55	.73	.82	1.30	.89
Personal care services	.10	.09	.27	.15	.79	.32	1.48	.44
Haircuts and other personal care services	.10	.09	.27	.15	.79	.32	1.48	.44
Miscellaneous personal services	.23	.18	.31	.24	1.33	.39	2.73	.48
Legal services	.12	.11	.33	.22	1.01	.42	2.04	1.19
Funeral expenses	.17	.14	.39	.21	.78	.39	1.86	.52
Laundry and dry cleaning services	.19	.10	.33	.15	.95	.25	1.84	.36
Apparel services other than laundry and dry cleaning	.04	.11	.25	.23	.93	.43	2.72	.72
Financial services	-.03	.69	.26	.87	2.45	1.33	5.71	1.67
Checking account and other bank services	.22	.69	.99	1.58	2.77	1.91	6.98	2.38
Tax return preparation and other accounting fees	.19	.57	.11	.95	2.03	1.38	5.44	1.66
Miscellaneous personal goods	-.14	.41	-.37	.68	-.34	.96	-.59	1.24
Stationery, stationery supplies, gift wrap	-.08	.40	-.29	.72	.08	1.04	.33	1.46
Infants' equipment	-.37	.56	-.43	.79	-1.83	1.10	-3.56	1.31
Special aggregate indexes								
Commodities	.17	.06	.22	.08	.53	.10	1.60	.13
Commodities less food and beverages	.15	.09	.19	.12	.38	.15	1.54	.19
Nondurables less food and beverages	.25	.13	.27	.18	.45	.23	2.38	.29
Nondurables less food, beverages, and apparel	-.12	.08	.48	.10	.34	.14	2.07	.15
Durables	.03	.07	.05	.11	-.35	.14	.08	.17
Services	.17	.04	.37	.06	1.10	.10	2.12	.11
Rent of shelter	.17	.05	.37	.06	1.11	.13	2.19	.14
Transportation services	.21	.11	.42	.16	1.02	.24	1.74	.31
Other services	.16	.09	.38	.12	1.20	.17	2.47	.23
All items less food	.12	.04	.30	.05	1.02	.08	1.91	.10
All items less shelter	.10	.05	.27	.06	.92	.08	1.71	.10

Table 1V. U.S. city average, median price change and median price change standard error for the Consumer Price Index for All Urban Consumers (CPI-U), by detailed expenditure categories for 1-, 2-, 6-, and 12-month intervals, 2012-Continued

Item and group	U.S. city average							
	1 Month		2 Month		6 Month		12 Month	
	Median price change	Median standard error	Median price change	Median standard error	Median price change	Median standard error	Median price change	Median standard error
Special aggregate indexes								
All items less medical care	0.13	0.04	0.27	0.05	0.91	0.08	1.74	0.09
Commodities less food	.15	.08	.18	.12	.39	.15	1.54	.19
Nondurables less food	.23	.12	.25	.17	.49	.22	2.36	.27
Nondurables less food and apparel	-.11	.08	.50	.10	.41	.13	2.08	.14
Nondurables	.23	.08	.35	.10	.64	.13	2.22	.16
Apparel less footwear	.01	.59	-.03	.86	.89	1.08	3.51	1.47
Services less rent of shelter	.17	.06	.33	.09	1.08	.13	2.03	.14
Services less medical care services	.16	.05	.34	.06	1.02	.11	1.95	.12
Energy	-.44	.12	-.22	.16	1.16	.21	.69	.17
All items less energy	.18	.04	.31	.05	1.01	.07	2.21	.09
All items less food and energy	.17	.04	.32	.05	.97	.09	2.14	.11
All items less food and shelter	.07	.05	.27	.07	.98	.10	1.73	.12
All items less food, shelter, and energy	.15	.06	.30	.08	.94	.11	2.17	.14
All items less food, shelter, energy, and used cars and trucks	.18	.06	.30	.08	1.03	.11	2.19	.15
Commodities less food and energy commodities	.01	.10	.04	.15	.34	.18	1.25	.24
Commodities less food, energy, and used cars and trucks	.08	.11	.06	.17	.43	.20	1.22	.26
Energy commodities	-.15	.14	.77	.16	.23	.19	2.43	.15
Services less energy services	.21	.04	.42	.05	1.22	.09	2.45	.10
Domestically produced farm food	.06	.14	.20	.15	.71	.17	2.61	.21
Utilities and public transportation	.06	.12	.07	.18	.33	.25	.50	.22

Table 2V. Northeast Region, median price change and median price change standard error for the Consumer Price Index for All Urban Consumers (CPI-U), by detailed expenditure categories for 1-, 2-, 6-, and 12-month intervals, 2012

Item and group	Northeast							
	1 Month		2 Month		6 Month		12 Month	
	Median price change	Median standard error	Median price change	Median standard error	Median price change	Median standard error	Median price change	Median standard error
Expenditure category								
All items	0.18	0.07	0.33	0.10	0.80	0.14	1.84	0.16
Food and beverages	.06	.17	.23	.19	.82	.26	2.53	.38
Food	.06	.19	.24	.21	.83	.28	2.56	.42
Food at home	.05	.31	.29	.33	.64	.38	2.44	.58
Food away from home	.15	.10	.39	.14	1.25	.24	2.73	.35
Alcoholic beverages	.06	.28	.11	.35	.86	.43	1.80	.47
Housing	.15	.09	.25	.12	.73	.20	1.46	.20
Shelter	.18	.09	.37	.13	1.05	.21	2.15	.22
Rent of primary residence	.22	.09	.41	.13	1.20	.20	2.49	.27
Owners' equivalent rent of residences	.18	.07	.34	.10	1.07	.18	2.15	.21
Owners' equivalent rent of primary residence	.18	.07	.34	.10	1.06	.18	2.13	.21
Fuels and utilities	.05	.30	-.39	.39	-1.85	.58	-2.62	.61
Household energy	.03	.36	-.63	.46	-2.46	.70	-3.78	.70
Energy services	-.59	.42	-1.00	.57	-2.98	.84	-5.59	.82
Electricity	-.56	.65	-1.01	.81	-1.62	1.13	-3.26	1.07
Utility (piped) gas service	.51	.32	-.56	.54	-5.22	.89	-11.42	.69
Household furnishings and operations	-.01	.23	.02	.33	.36	.48	.96	.59
Apparel	-.61	.95	-.05	1.58	.77	2.15	3.26	2.43
Transportation	.40	.12	.84	.15	1.14	.21	2.72	.29
Private transportation	.49	.12	.79	.15	1.18	.22	2.75	.32
New and used motor vehicles	-.09	.20	-.17	.27	-.66	.42	-.14	.56
New vehicles	.02	.21	.14	.27	.57	.50	1.13	.64
New cars and trucks	.02	.19	.14	.20	.57	.44	1.14	.54
New cars	-.03	.23	-.05	.27	-.12	.51	.87	.67
Used cars and trucks	-.25	.02	-.64	.05	-1.00	.12	2.54	.32
Motor fuel	1.27	.15	2.06	.21	2.30	.24	6.45	.21
Gasoline (all types)	1.29	.16	2.07	.22	2.41	.24	6.47	.21
Gasoline, unleaded regular	1.40	.37	2.14	.41	2.16	.41	6.34	.38
Gasoline, unleaded midgrade	1.04	.32	2.19	.41	2.95	.40	6.80	.34
Gasoline, unleaded premium	1.03	.23	2.21	.41	3.10	.41	6.91	.40
Medical care	.27	.14	.53	.23	1.83	.40	3.65	.54
Medical care commodities	.09	.29	.36	.39	2.20	.63	3.60	.86
Medical care services	.24	.14	.58	.21	1.74	.39	3.57	.56
Professional services	.10	.11	.23	.18	.64	.54	1.52	.85
Recreation	.03	.31	.06	.42	.59	.57	1.49	.97
Education and communication	.08	.09	.15	.15	.50	.34	1.08	.55
Other goods and services	.18	.19	.22	.28	1.10	.51	2.58	.60
Special aggregate indexes								
Commodities	.26	.13	.52	.18	.60	.25	1.90	.29
Commodities less food and beverages	.21	.18	.62	.28	.60	.36	1.93	.40
Nondurables less food and beverages	.34	.26	.96	.42	.81	.53	2.96	.60
Nondurables less food, beverages, and apparel	.56	.14	1.19	.21	.54	.22	2.93	.29
Durables	-.07	.13	-.01	.19	-.18	.32	.35	.37
Services	.16	.07	.31	.10	.92	.15	1.88	.17
Rent of shelter	.18	.09	.37	.13	1.05	.21	2.15	.22
Transportation services	.24	.25	.40	.31	.81	.44	1.49	.63
Other services	.18	.15	.36	.22	1.05	.36	2.34	.50
All items less food	.18	.08	.33	.11	.82	.15	1.82	.18
All items less shelter	.20	.09	.30	.12	.64	.17	1.68	.22
All items less medical care	.16	.08	.31	.11	.74	.14	1.74	.17
Commodities less food	.22	.17	.61	.27	.60	.35	1.92	.39
Nondurables less food	.35	.24	.90	.39	.77	.50	2.88	.56
Nondurables less food and apparel	.53	.14	1.17	.20	.56	.21	2.84	.27
Nondurables	.28	.16	.64	.23	.80	.31	2.49	.35
Services less rent of shelter	.12	.11	.29	.14	.60	.21	1.46	.28
Services less medical care services	.15	.08	.28	.10	.89	.16	1.72	.18
Energy	.14	.20	.71	.24	.25	.37	1.76	.37
All items less energy	.18	.07	.34	.11	.87	.15	2.06	.18
All items less food and energy	.18	.08	.33	.12	.86	.17	1.99	.20
Commodities less food and energy commodities	-.08	.21	.23	.33	.51	.45	1.40	.50
Energy commodities	1.13	.16	2.18	.24	1.02	.23	5.56	.21
Services less energy services	.21	.07	.37	.10	1.09	.16	2.35	.18

Table 3V. Midwest Region, median price change and median price change standard error for the Consumer Price Index for All Urban Consumers (CPI-U), by detailed expenditure categories for 1-, 2-, 6-, and 12-month intervals, 2012

Item and group	Midwest							
	1 Month		2 Month		6 Month		12 Month	
	Median price change	Median standard error	Median price change	Median standard error	Median price change	Median standard error	Median price change	Median standard error
Expenditure category								
All items	0.08	0.06	0.21	0.09	0.95	0.13	1.86	0.18
Food and beverages	.16	.15	.29	.19	.85	.19	2.64	.24
Food	.16	.16	.28	.19	.88	.20	2.68	.23
Food at home	.05	.23	.12	.28	.57	.30	2.62	.33
Food away from home	.23	.09	.43	.14	1.48	.24	2.94	.32
Alcoholic beverages	.08	.24	.04	.58	.84	.66	2.25	.67
Housing	.08	.07	.25	.10	.73	.17	1.34	.21
Shelter	.19	.08	.32	.12	1.03	.19	1.97	.26
Rent of primary residence	.19	.06	.39	.10	1.22	.17	2.26	.23
Owners' equivalent rent of residences	.17	.06	.32	.09	.97	.18	1.84	.28
Owners' equivalent rent of primary residence	.17	.06	.32	.09	.97	.18	1.84	.28
Fuels and utilities	-.07	.25	-.03	.37	.00	.61	-1.53	.46
Household energy	-.16	.32	-.46	.42	-.61	.69	-3.09	.54
Energy services	-.26	.32	-.43	.44	-.30	.71	-2.85	.53
Electricity	-.07	.28	.58	.48	.76	1.17	1.82	.59
Utility (pipel) gas service	-.18	.58	-1.53	.78	-8.55	1.20	-11.40	.84
Household furnishings and operations	-.04	.26	-.01	.39	.49	.51	1.06	.58
Apparel	-.18	.90	.04	1.09	1.30	1.73	3.61	2.62
Transportation	-.07	.14	-.09	.17	1.59	.21	2.24	.26
Private transportation	-.15	.14	-.13	.16	1.63	.19	2.47	.23
New and used motor vehicles	-.11	.14	-.06	.22	-.48	.35	.50	.45
New vehicles	.09	.19	.21	.27	.63	.47	1.35	.68
New cars and trucks	.09	.24	.22	.29	.61	.39	1.37	.50
New cars	.18	.21	.04	.34	.17	.44	.80	.64
Used cars and trucks	-.24	.03	-.62	.05	-1.13	.13	1.88	.30
Motor fuel	-.85	.33	-1.09	.36	2.53	.39	2.89	.35
Gasoline (all types)	-.89	.34	-.99	.37	2.62	.39	2.74	.35
Gasoline, unleaded regular	-.95	.48	-.86	.51	2.50	.77	2.71	.59
Gasoline, unleaded midgrade	-.59	.56	-1.71	.72	2.97	.98	2.59	.81
Gasoline, unleaded premium	-.78	.54	-.85	.71	3.00	.84	3.64	.68
Medical care	.27	.12	.63	.20	2.09	.33	4.02	.43
Medical care commodities	.11	.28	.35	.35	1.90	.50	3.85	.61
Medical care services	.39	.13	.63	.25	2.19	.43	4.10	.52
Professional services	.22	.12	.33	.24	1.13	.57	2.17	.72
Recreation	.08	.34	.26	.58	.91	.74	1.42	1.02
Education and communication	.09	.08	.14	.14	.81	.25	1.81	.33
Other goods and services	.08	.16	.20	.24	1.41	.37	2.23	.47
Special aggregate indexes								
Commodities	-.06	.11	.02	.14	.63	.20	1.77	.29
Commodities less food and beverages	-.16	.15	-.31	.19	.81	.30	1.95	.43
Nondurables less food and beverages	-.32	.24	-.17	.28	1.09	.39	3.06	.66
Nondurables less food, beverages, and apparel	-.28	.17	-.47	.20	1.33	.23	2.32	.31
Durables	-.07	.13	-.10	.22	-.57	.32	.41	.45
Services	.17	.07	.38	.11	1.18	.15	1.87	.19
Rent of shelter	.19	.08	.31	.12	1.02	.19	1.96	.26
Transportation services	.29	.23	.56	.36	1.10	.40	1.54	.54
Other services	.18	.16	.40	.28	1.25	.35	2.85	.48
All items less food	.07	.07	.15	.09	1.02	.14	1.92	.21
All items less shelter	.06	.08	.16	.11	.93	.15	1.80	.22
All items less medical care	.06	.07	.16	.09	.85	.14	1.65	.20
Commodities less food	-.16	.15	-.28	.18	.80	.29	1.98	.42
Nondurables less food	-.32	.23	-.13	.27	1.05	.37	3.11	.63
Nondurables less food and apparel	-.28	.17	-.34	.19	1.27	.22	2.48	.31
Nondurables	-.10	.15	.18	.17	.73	.22	2.58	.37
Services less rent of shelter	.20	.11	.43	.16	1.28	.21	1.94	.25
Services less medical care services	.15	.08	.33	.12	1.06	.16	1.67	.21
Energy	-.48	.25	-.65	.26	1.12	.39	.27	.34
All items less energy	.16	.06	.33	.08	1.01	.12	2.25	.19
All items less food and energy	.20	.07	.29	.09	.99	.14	2.14	.22
Commodities less food and energy commodities	.10	.15	.14	.21	.41	.35	1.58	.49
Energy commodities	-.93	.31	-1.20	.34	1.89	.37	2.50	.33
Services less energy services	.19	.07	.41	.10	1.20	.15	2.40	.20

Table 4V. South Region, median price change and median price change standard error for the Consumer Price Index for All Urban Consumers (CPI-U), by detailed expenditure categories for 1-, 2-, 6-, and 12-month intervals, 2012

Item and group	South							
	1 Month		2 Month		6 Month		12 Month	
	Median price change	Median standard error	Median price change	Median standard error	Median price change	Median standard error	Median price change	Median standard error
Expenditure category								
All items	0.15	0.06	0.25	0.08	0.87	0.13	1.87	0.17
Food and beverages	.15	.10	.21	.11	.85	.16	2.46	.19
Food	.17	.11	.22	.11	.86	.17	2.50	.19
Food at home	.08	.17	.16	.18	.60	.25	2.33	.30
Food away from home	.20	.09	.37	.13	1.35	.22	2.72	.28
Alcoholic beverages	.11	.27	.24	.42	.87	.53	1.91	.61
Housing	.09	.09	.26	.14	.77	.23	1.77	.32
Shelter	.17	.08	.39	.11	1.17	.22	2.30	.34
Rent of primary residence	.14	.11	.32	.15	1.20	.29	2.83	.37
Owners' equivalent rent of residences	.21	.08	.36	.11	1.13	.22	2.10	.36
Owners' equivalent rent of primary residence	.21	.08	.36	.11	1.13	.22	2.10	.36
Fuels and utilities	-.09	.27	-.14	.64	-.57	.81	-.02	.64
Household energy	-.28	.35	-.49	.78	-1.47	.98	-1.60	.50
Energy services	-.34	.35	-.51	.81	-1.38	1.03	-1.64	.52
Electricity	-.08	.35	-.52	.88	-1.54	1.16	-.50	.63
Utility (pipel) gas service	.43	.62	-1.56	.77	-6.29	1.22	-8.70	1.48
Household furnishings and operations	-.07	.16	.05	.33	.23	.37	.58	.49
Apparel	-.23	.88	-.35	1.26	.73	1.47	3.11	1.70
Transportation	.50	.11	.09	.16	.41	.23	2.30	.25
Private transportation	.52	.11	.09	.16	.40	.24	2.34	.21
New and used motor vehicles	.12	.12	.22	.19	-.01	.26	.98	.35
New vehicles	-.01	.18	-.02	.28	.50	.39	1.38	.52
New cars and trucks	-.01	.15	-.02	.21	.49	.30	1.33	.46
New cars	-.05	.19	.06	.25	.27	.41	.90	.46
Used cars and trucks	-.23	.02	-.49	.04	-.97	.11	2.25	.30
Motor fuel	.96	.22	.61	.28	-.86	.33	2.31	.26
Gasoline (all types)	1.02	.22	.57	.29	-.88	.34	2.26	.27
Gasoline, unleaded regular	1.05	.28	.58	.45	-.96	.58	2.17	.53
Gasoline, unleaded midgrade	.94	.27	.55	.44	-.70	.51	2.43	.42
Gasoline, unleaded premium	.91	.28	.51	.44	-.39	.46	2.60	.44
Medical care	.19	.13	.43	.21	1.78	.44	3.68	.49
Medical care commodities	.26	.32	.29	.45	1.50	.88	2.88	1.01
Medical care services	.23	.13	.45	.22	1.92	.40	3.84	.55
Professional services	.06	.17	.30	.22	1.03	.57	2.07	.57
Recreation	.04	.17	.04	.26	.47	.43	.82	.54
Education and communication	.12	.09	.24	.13	.79	.23	2.42	.35
Other goods and services	.11	.18	.17	.24	.71	.35	1.80	.39
Special aggregate indexes								
Commodities	.15	.10	.29	.15	.33	.16	1.48	.19
Commodities less food and beverages	.10	.15	.10	.22	.11	.24	1.30	.28
Nondurables less food and beverages	.18	.21	.51	.31	.02	.34	2.16	.40
Nondurables less food, beverages, and apparel	.47	.13	.36	.18	.01	.26	2.01	.27
Durables	.00	.12	.05	.21	-.31	.21	.08	.29
Services	.16	.08	.34	.10	1.05	.18	2.31	.25
Rent of shelter	.17	.08	.38	.11	1.15	.23	2.26	.34
Transportation services	.27	.17	.66	.25	1.21	.54	2.69	.68
Other services	.21	.10	.36	.14	1.14	.25	2.32	.34
All items less food	.13	.07	.19	.10	.89	.14	1.87	.20
All items less shelter	.14	.08	.11	.11	.81	.14	1.66	.16
All items less medical care	.15	.07	.26	.09	.79	.13	1.76	.18
Commodities less food	.10	.15	.13	.21	.12	.23	1.30	.27
Nondurables less food	.18	.20	.53	.29	.01	.33	2.18	.38
Nondurables less food and apparel	.44	.12	.39	.18	.07	.25	2.05	.25
Nondurables	.25	.12	.57	.18	.25	.19	2.12	.23
Services less rent of shelter	.14	.09	.29	.16	.89	.25	2.38	.26
Services less medical care services	.16	.08	.34	.11	.98	.19	2.10	.27
Energy	.38	.21	-.79	.33	.80	.43	.74	.30
All items less energy	.19	.06	.29	.09	1.08	.13	2.34	.18
All items less food and energy	.15	.07	.30	.10	1.08	.15	2.30	.22
Commodities less food and energy commodities	-.10	.17	.09	.26	.35	.29	1.30	.35
Energy commodities	.93	.21	.61	.28	-.88	.32	2.27	.26
Services less energy services	.21	.06	.41	.08	1.28	.17	2.58	.25

Table 5V. West Region, median price change and median price change standard error for the Consumer Price Index for All Urban Consumers (CPI-U), by detailed expenditure categories for 1-, 2-, 6-, and 12-month intervals, 2012

Item and group	West							
	1 Month		2 Month		6 Month		12 Month	
	Median price change	Median standard error	Median price change	Median standard error	Median price change	Median standard error	Median price change	Median standard error
Expenditure category								
All items	0.30	0.08	0.28	0.10	1.15	0.17	2.08	0.14
Food and beverages	.11	.16	.24	.17	.85	.20	2.09	.26
Food	.12	.17	.23	.18	.83	.22	2.18	.26
Food at home	.06	.28	.15	.26	.38	.31	1.55	.32
Food away from home	.21	.09	.36	.13	1.47	.27	3.18	.42
Alcoholic beverages	.05	.36	.26	.54	.94	.61	1.10	.62
Housing	.18	.09	.39	.12	.99	.31	1.96	.21
Shelter	.19	.08	.38	.13	1.08	.31	2.29	.24
Rent of primary residence	.29	.08	.58	.15	1.51	.53	2.94	.39
Owners' equivalent rent of residences	.18	.06	.39	.10	1.08	.26	2.06	.29
Owners' equivalent rent of primary residence	.18	.06	.39	.10	1.08	.26	2.06	.29
Fuels and utilities	.27	.31	.40	.66	1.48	.91	1.18	.40
Household energy	.02	.32	.25	.66	.61	1.02	-.82	.26
Energy services	.02	.35	.30	.69	.75	1.06	-.82	.26
Electricity	.12	.34	.33	.77	1.11	1.53	1.18	.46
Utility (piped) gas service	.01	.42	-.71	.69	-1.25	1.63	-6.72	.88
Household furnishings and operations	.06	.24	.04	.37	.28	.47	.54	.66
Apparel	.13	1.06	.86	1.37	2.10	1.99	3.97	2.48
Transportation	.53	.13	.07	.15	1.47	.21	2.48	.23
Private transportation	.48	.12	.05	.15	1.58	.21	2.63	.21
New and used motor vehicles	-.11	.12	-.16	.17	.24	.26	1.04	.38
New vehicles	.20	.19	.33	.25	.74	.33	1.77	.45
New cars and trucks	.19	.18	.31	.23	.68	.41	1.79	.56
New cars	.14	.17	.31	.27	.60	.34	1.41	.44
Used cars and trucks	-.30	.03	-.43	.07	-1.15	.25	.24	.71
Motor fuel	.99	.33	-.77	.32	2.21	.48	3.87	.32
Gasoline (all types)	1.06	.34	-.80	.32	2.29	.50	3.86	.33
Gasoline, unleaded regular	1.04	.88	-.86	.88	2.28	1.04	3.90	.66
Gasoline, unleaded midgrade	1.17	.87	-.64	.91	2.51	1.08	3.86	.76
Gasoline, unleaded premium	1.11	.91	-.58	.88	2.25	1.15	3.70	.78
Medical care	.23	.14	.56	.20	1.78	.33	3.48	.37
Medical care commodities	.12	.28	.32	.37	.73	.52	1.65	.76
Medical care services	.26	.15	.67	.21	2.07	.35	3.97	.44
Professional services	.15	.10	.39	.15	1.05	.32	1.90	.39
Recreation	-.06	.35	.21	.51	.67	.69	1.06	.96
Education and communication	.14	.16	.22	.23	.82	.37	1.96	.39
Other goods and services	.00	.23	.17	.39	.74	.45	1.21	.71
Special aggregate indexes								
Commodities	.36	.14	-.09	.18	.77	.23	1.72	.28
Commodities less food and beverages	.41	.21	-.27	.27	.76	.35	1.74	.43
Nondurables less food and beverages	.53	.31	-.49	.39	1.25	.54	2.51	.65
Nondurables less food, beverages, and apparel	.62	.18	-.44	.21	1.14	.30	2.19	.31
Durables	.13	.14	.07	.20	-.20	.26	-.33	.28
Services	.22	.08	.45	.11	1.22	.25	2.35	.17
Rent of shelter	.18	.08	.39	.13	1.09	.31	2.31	.24
Transportation services	.04	.18	.13	.26	.88	.40	1.19	.56
Other services	.24	.18	.32	.30	1.13	.44	2.63	.50
All items less food	.32	.08	.30	.11	1.22	.19	2.07	.16
All items less shelter	.36	.11	.27	.13	1.15	.17	1.96	.20
All items less medical care	.30	.08	.26	.10	1.09	.18	2.00	.15
Commodities less food	.41	.20	-.26	.26	.75	.34	1.67	.41
Nondurables less food	.51	.29	-.46	.37	1.22	.51	2.40	.61
Nondurables less food and apparel	.61	.17	-.41	.20	1.14	.30	2.06	.29
Nondurables	.40	.18	-.15	.22	.96	.30	2.28	.34
Services less rent of shelter	.27	.13	.42	.20	1.29	.25	2.45	.26
Services less medical care services	.22	.09	.41	.12	1.14	.28	2.18	.19
Energy	1.40	.24	.16	.29	2.91	.37	1.93	.29
All items less energy	.17	.08	.33	.10	1.03	.17	2.07	.16
All items less food and energy	.18	.08	.32	.11	1.06	.19	2.05	.18
Commodities less food and energy commodities	.10	.22	.14	.29	.40	.41	.88	.51
Energy commodities	.97	.31	-.82	.31	2.05	.49	3.77	.34
Services less energy services	.20	.07	.42	.10	1.29	.22	2.47	.18